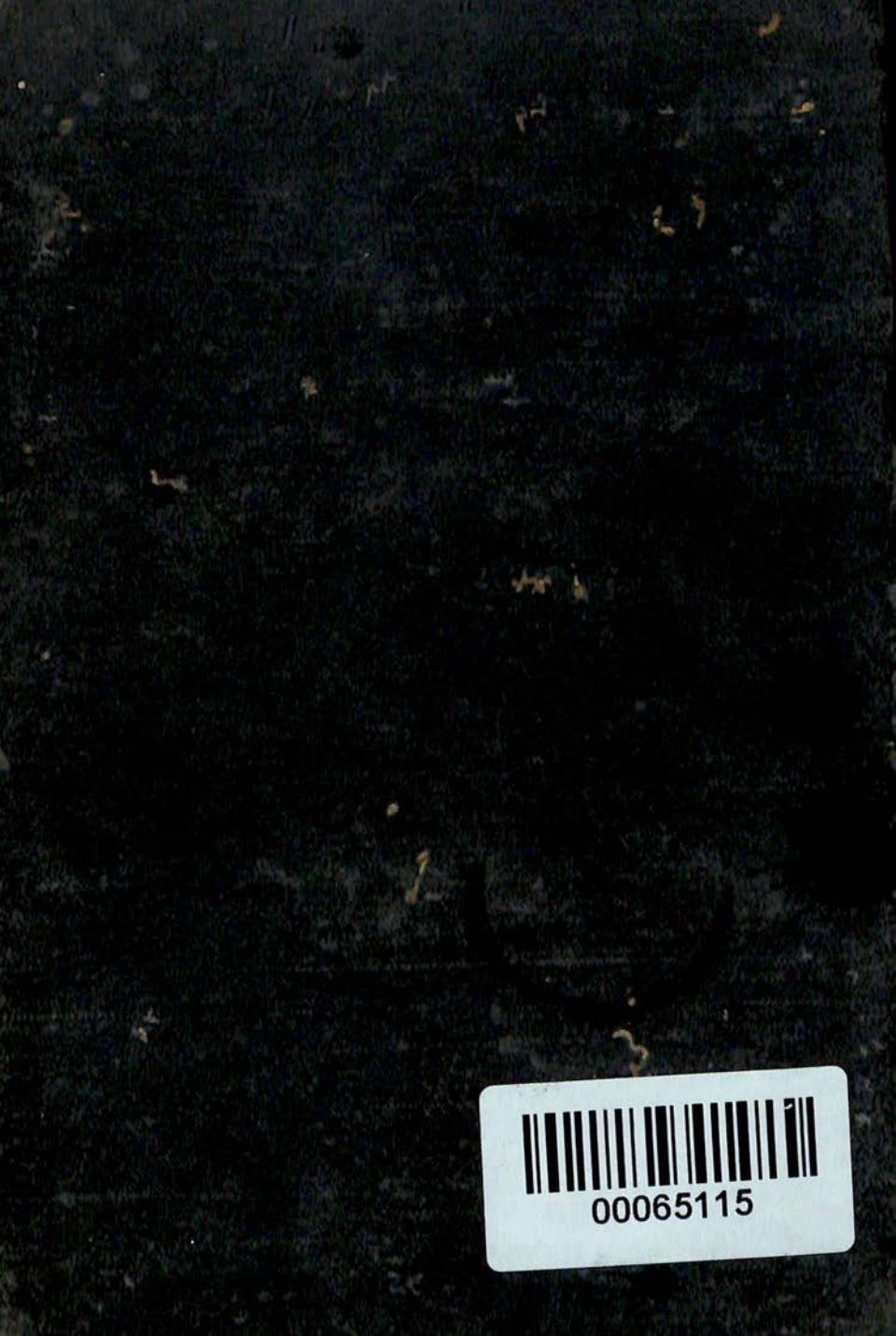
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LANGUAGE AND ITS STUDY,

WITH ESPECIAL REFERENCE TO THE

INDO-EUROPEAN FAMILY OF LANGUAGES.

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SEVEN LECTURES

BY

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EDITED,

WITH INTRODUCTION, NOTES, TABLES OF DECLENSION AND CONJUGATION, GRIMM'S LAW WITH ILLUSTRATION, AND AN INDEX,

BY THE REV. R. MORRIS, M.A., LL.D.

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EDITOR'S PREFACE.

With the consent of the author and publisher, I have ventured to reprint the first seven of Professor Whitney's lectures on 'Language and the Study of Language,' believing that they are admirably adapted for the use of pupils in the higher forms of our public and middle-class schools, and for young students generally, as an easy, and, at the same time, a sound and scientific, introduction to a more advanced course of comparative philology.

Professor Whitney is a well-known Sanskrit scholar, but in these lectures he makes but little use of the old Hindu language for illustrating the fundamental positions and leading principles of *the science of language*. He has preferred to proceed from the known to the unknown, and has therefore chosen English as the language from which the most telling of his examples and explanations of linguistic changes are drawn. His illustrations are neither too many nor too few, and there is plenty of room left for the reader's industry and ingenuity to produce instances from any other language or languages with which he may be acquainted.

General principles relating to word-making, origin of suffixes, changes in the meanings and forms of words, and many

other subjects embraced by the science of language, are made most clear and evident by means of familiar and well-known instances; they are not likely to be soon forgotten, and their application is afterwards no very difficult task.

I have found Professor Whitney's lectures of great service, not only in giving elementary instruction in general grammar, but also in the more special field of English philology. By means of these lectures not a few students have acquired a taste for what was previously to them a dry and difficult study, and have subsequently been led to take up the science of language as treated of more technically and scholastically in the works of *Grimm, Bopp, Schleicher, Curtius, Max Müller*, &c.

A few notes, and tables of declensions and conjugations, have been added by the editor in the hope of making the work still more generally useful. The *introduction* prefixed to this volume contains the substance of a lecture delivered before a body of teachers for the purpose of showing (as Professor Whitney has so admirably done) the value of English as a means of philological instruction.

R. M.

INTRODUCTION.

[BY THE EDITOR.]

It may help us to take a more abiding interest in those changes that languages have undergone in times gone by, if we bear in mind the important fact that similar changes are still going on, that the old linguistic processes are still at work, and that their causes may be now ascertained by the attentive study of a living tongue. By reason of its composite vocabulary, the various phases through which its grammatical system has passed, the marvellous way in which it has replaced its numerous losses, the quick growth of new forms which has kept pace with its no less rapid changes, its admixture of old and new methods (which after all are a return to still more primitive modes), the English language is no unfit subject for teaching the leading principles of philology. Professor Whitney has well remarked that "the general truths of linguistic science, having once been wrought out by the study and comparison of many tongues, are capable of being so distinctly stated and so clearly illustrated out of the resources of English as to be made patent to the sense of every intelligent and well-instructed English scholar." (*Oriental and Linguistic Essays*, 1st Series, p. 400.)

But objections have been taken to English as a means of philological instruction because it has no extensive system of grammatical inflexions like Sanskrit or the classical languages. The want of a highly inflexional structure has no doubt created a kind of prejudice against English; and some

persons have not even scrupled to speak of our language as an inferior kind of speech, devoid of grammar, and not much better than Chinese. Such a notion as this could only have arisen in the minds of those who had formed a false conception of the origin and value of grammatical endings, who had come to regard suffixes as part and parcel of the roots to which they are joined, and had been accustomed to think of endings as growing out of roots something after the manner of the branches and trunk of a tree.

The historical study of languages shows us that this view is altogether untrue. Inflexions are not absolutely necessary to a language. There are many tongues entirely without any of those little particles to which we learn to attach so much importance; yet these languages are found to be perfectly competent and admirably adapted for the interchange and intercommunication of thought. It may horrify those who advocate the study of the classical languages merely on the ground of their complex grammatical structure, to be told that it is possible for a language to exist without those means of expressing number, gender, case, tense, mood, &c., possessed by the older Aryan speeches. We have been so wont to look upon these artifices of language as essentials, and so used to regard words as divided into certain fixed and determinate classes according to their formal character, that it becomes very difficult to realize the idea that "it is not an inherent quality in a word to be of this or that part of speech." *

Comparative philology teaches us that words do not really possess any such inherent distinctions; and one use of the study of English is to force us to see this, and to disabuse our minds of the false notions we may have formed with respect to it. Now the fact of the absence of any formal distinction of the parts of speech in our own language is important and cannot be too strongly insisted upon. The function of a word in the sentence of which it forms a part, that is, its use, alone determines the *part of speech* to which it rightly belongs.

Nor does English stand alone in this respect. There are

* See Earle's Philology of the English Tongue, p. 207.

other living languages, having no historical connection with our own, that exhibit a very undeveloped stage of linguistic growth, whose chief characteristic is this full and unlimited use of their words, so very different from anything that we are accustomed to see in the more highly developed Aryan and Semitic tongues.

Every word in Chinese, without any change of form, may be used as a noun, adjective, verb, or adverb: *Ta* may mean great, greatness, to grow, very much, very.* Languages like this do very well without inflexions.

In Japanese the plural of nouns is formed by *repetition*. Tenses are expressed by adverbs; the Present by a word like our *now;* the Past by a word meaning *past, spent, enough;* the Future by *will, desire, intend.* In this language there are no relative pronouns and no relative clauses.

The Bushman, Malay, and other languages also form the plural by repetition or reduplication. The Canarese makes collective nouns by this means.

This method of denoting the plural is perhaps a primitive one. A later device is to add some word that gives a collective sense, as *kind* in the English *mankind.* Languages that have lost these plural inflexions often go back to some such method.

In Hindi the words *log* (= Sansk. *loka*, people), *gan* (= Sansk. *gana*, multitude), and *jâti* (= Sansk. *jâti*, kind, sort) serve to indicate the plural; *sevak log* = servants; *devan* = the gods; *strîjâti* = womankind, women. In other Indian dialects we find *dig* (= Sansk. *dish*, world, region), *varg* (= Sansk. *varga*, crowd), used for the same purpose. Sinhalese employs the syllable *val* (connected by Mr Childers with Sansk. *vana*, a forest) to form the plural of neuter nouns, *ruk*, a tree, *rukval*, trees.

But this unrestricted employment of our words as any parts of speech whatsoever was not the characteristic of English in its older stages, nor has it acquired this new habit in a day. This return to a more primitive mode of speech is due to the loss of our grammatical apparatus, so that we are

* There must have been in the old Aryan speech a root *magh* which could be used like the Chinese *ta*. It still exists in *may, mai*-n, *migh*-t, *mo*-re, *much*.

compelled to do without many of the older inflexions. But we must remember that nothing is lost in a living tongue without some compensation being provided for the loss: we shall have occasion to speak of this more particularly hereafter.

But before going further it will not be amiss to illustrate by one or two examples the simplicity of our language in its dealing with words as any parts of speech.

Our first illustration shall be taken from those onomatopœas usually classed as *Interjections*. Thus *hem*, an imitation (not the real sound itself) of the sound made in clearing the voice before speaking, or in drawing the attention of those to whom we wish to speak, may be used as a *verb* in 'to cough and *hem*,' as a *noun* in the following passage from 'The Two Angry Women of Abingdon' (Old English Plays, ed. 1874, vol. vii., p. 300),

> ——And when he scarce can trim
> His gouty fingers, thus he'll phillip it,
> And with a rotten *hem*, Ay, my hearts,
> Merry go sorry!

In the next example it, and the interjection of *mum* expressing silence, are used as adjectives in the sense of *silent* and *talkative*.

> Where is she? there she goeth let us see whither,
> Now pleased, now froward; now *mum*, now *hem*.
> *Calisto and Melibœa*, Old Eng. Plays, I., p. 74.

Mum is used as a noun in *Piers Plowman* (Prol. l. 9), and from it has been formed the word *mump*, *mumpy*, and *mumble*.

More familiar instances of this kind are words that were formerly *nouns*, which may now be used in a variety of ways that would have shocked the grammatical propriety of our forefathers. Thus, to take the word *back*. We may say, 'The *back* of your cart is too broad to pass in this way; *back* with you! Go *back* by the *back* way, and take care when you *back* your horses.'

Here the word *back* within a very limited range of expressions is used as a *noun*, *interjection*, *adverb*, *adjective*, and *verb*.

Words that were once treated as *verbs*, and verbs only,

may be used as *nouns* without any change of form to mark the difference of use. We talk of 'a long *run*,' 'a great *take-in*,' 'a long *strike*,' &c.

There is very little difficulty in the way of using *nouns* as *adjectives*. We have only to put a noun before another noun to give it the right to be called an *adjective*;

> The *meteor* flag of England
> Shall yet terrific burn.

So we talk without any sense of incongruity of 'a *gold* pencil,' 'a *silver* thimble,' a '*mud* hut,' &c.

In other cases we are more squeamish and fastidious, and should hardly dare imitate the following;

> When first I took thee, 'twas for *good* and *bad*.
> O change thy *bad* to *good*.
> (T. Heywood, The Late Lancashire Witches.

Even when the adjective is compared its use is not restricted; and we may say, 'He is a *better* man, and behaves *better* than he formerly did. He has learnt how *to better* his condition, and to get the *better* even of his *betters*.' Cp. the use of *like* in 'He is *like* his brother, we have never seen his *like*; we *like* him much.'

Even the Pronouns are not allowed always to remain such. In Middle English we find *he* and *she* used as nouns = *male* and *female*; just as we may colloquially talk of *hes* and *shes*. This has led to the use of *he* and *she* in composition to replace *gender-suffixes*: as '*he*-goat,' '*she*-bear.' In 'The First Part of Jeronimo' (p. 357, vol. iv. of Old English Plays, ed. Hazlitt, 1874) we meet with the expression 'I'll be the *he* one,' where '*the he one*' = the man-midwife!

Thou is a verb in Hickscorner (p. 180, vol. i. of Dodsley's Old Plays, ed. 1874):

> Avaunt, caitiff, dost thou *thou* me!

The use of *self* both as a *noun* and a *pronoun* is too familiar to need an illustration, but few are aware that in Early English the pronoun *what* was sometimes treated as a *noun*, producing our common indefinite pronoun *some what* as well as the archaic *much what*, *many what*, &c. Cp. 'Ah ȝette me

an hwat' = Grant me *one* thing. (Saint Katherine, ed. Morton, p. 41, l. 769.)

But to go back for a while to such expressions as 'a *gold* pencil.' The loss of endings, as we have said, must in some way or other be made good. It is not always done exactly in the same manner. Thus, to make *gold* an adjective we simply put it before the word *pencil*. The mere position and collocation of a noun like *gold* with another noun is really due to the circumstance that such words as *gold*, *steel*, *silver*, &c., once possessed a suffix which marked the adjectival relation, hence the adjectives *golden* or *gilden*, *steelen*, *silveren*, *earthen*, with a host of others no longer in use.

We could once say '*clouden*,' '*firen*,' as in the following lines from the 'Cursor Mundi,' where the writer in speaking of the Jews says,

> God him selve thaim led thair way,
> To wise and kepe bath night and day,
> With *clouden* piler on day liht,
> With *firen* piler upon the niht.
> (G., ll. 6195-6.)

In the Fairfax MS. *fire* is used for *firen*; just as we say *gold* for *golden*. In the Prayer-book version of the Psalms *cloudy* is used for *clouden*, which is about as bad a blunder as if we were to speak of a '*muddy* house' instead of a '*mud* house', which are, of course, quite different things.

But this loss of *-en* reminds me that while a language (or rather the speakers of a language) may lose an inflexion and so appear to diminish its resources in one direction, yet it has its own devices for extending the use of some well-recognized particle, and for making good its deficiencies in other quarters. Thus the loss of *-en* may be a matter of regret, but the almost unrestricted use of the suffix *-ed* (by which almost any noun may be turned into an adjective) is a real gain to our language, notwithstanding the protest of purists. We say *one-eyed*, *four-footed*, *bearded*, *booted*, *letter'd*, *landed*, *cloister'd*. We have even met with the phrase '*ill*-wived' and '*ill*-husbanded wretches.'

But we are not quite so free with the use of this *-ed* ending as old Markham in the following passage on the choice of a dog:

If you will have a good tike,
Of which there are few like,
He must be *headed* like a snake,
Neckt like a drake,
Backt like a beam,
Sided like a bream,
Tailed like a rat,
And *footed* like a cat.

We have no suffixes for inceptive verbs. We once had. In O.E. we could form from the adjective *great* the verb *great-i-an*, to become great.* When the suffix dropped off the uninflected word *great* was used in the older sense, as, 'they *grete*,' translates *grandescunt* in Palladius on Husbondrie. Old Fuller renders 'Hæc planta *arborescit*' by 'This plant *doth tree it*.'

The use of *it* is only a device to get a substitute for an inflexion. The mere putting it after a noun to simulate an object enables us to use such expressions as 'to *lord it*,' 'to *foot it*,' 'to *wanton it*,' 'to *devil-porter it*,' and with the author of Dr Syntax to say,

'I'll *prose it* here, I'll *verse it* there,
And *picturesque it* everywhere.'

A slight change of pronunciation has enabled us to do without an inflexion, so instead of the old *bæth-i-an*, *glæs-i-an*, we say, *to bathe*, *to glaze*, while the nouns *bath* and *glass* keep the sharp spirant. Cp. *life* and *to live*, *com'pact* and *compact'*, *con'duct* and *conduct'*, &c.

The mind connects the words of a sentence without any signs of relation, as when we use intransitive verbs causatively and transitively; as, 'to *stay* proceedings,' 'to *run* a thorn into one's finger.' It is to this fact that the next principle, of which we are about to speak, is due.

We saw (p. xii) that in the mere collocation of two nouns without any sign of relation, the first became an adjective. But we may also put words in juxtaposition as a substitute for case-endings; as *ink-stand*, *noon-tide*, *man-killer*, *pick-pocket*, &c. Now it is to this habit of putting two words

* Strange as it may seem, this *i* is only a remnant of an old *ya*, to go; hence *become* is not a bad substitute for the lost suffix.

together for the purpose of forming compounds that we owe all our *suffixes*.

In this collocation of two terms it often happens that the latter is subordinate to the other, as in *dove-like*, *war-like*, *hand-ful*.

This process of joining words together is sometimes called *agglutination*, and there are many languages that have not yet reached an inflected stage, and are obliged to resort to this method for denoting the relationship of words to each other, and also to express grammatical relations of plurality, gender, tense, mood, &c.

In the examples we have chosen we see, (1) that each element in the compound is really an independent word; (2) that the latter element is to a certain extent subordinated to the other, and is unaccented; (3) that although the last element is seen to be a veritable word, yet it has not the full meaning it has when employed by itself out of the compound. Thus *war-like* is not exactly *like war*, nor is *hurt-full*, full of hurt. The words *like* and *full* have become, according to a Chinese expression, mere empty words, and are simply formative words, or signs of a grammatical relation.

The English language abounds in examples of *full* or significant words becoming *empty*.

Take for example the latter part of the compounds *heir-loom*, *gospel*, *kind-red*, *wor-ship*, or the more familiar *like-wise*, *wheel-wright*: have we not to learn the meanings of them? they are not now quite self-evident, though there was a time when they were.

The word *likewise* is a shortening of *in like wise*, or in like manner: cp. *no-wise*, *any-wise*, &c. It contains the word *wise*, mode, manner, which is still more disguised in the word *righteous*, once written *rightwise*, and we had also *wrongwise*, *skil-wise* &c. Cp.

> For Godd es ever on *right-wis* side
> Werring again *wrang-wis* pride.
> (*Cursor Mundi.*)

The latter part of *wheel-wright* is the same as the proper name *Wright*. It signifies a workman, and is connected with

work and *wrought*. As an independent word (in the sense of carpenter), it occurs in the Prologue to Chaucer's Canterbury Tales, l. 614:

"He was a wel good *wright*, a carpenter."

Cp. the following passage from "The Wright's Chaste Wife":

Lystyn, and ye schalle here:
Of a *wryght* I wille you telle,
That some tyme in thys land gan dwelle,
And lyued by hys myster.
Whether that he were yn or owte,
Of erthely man hadde he no dowte,
To *werke* hows, harrowe, nor plough,
Or other werkes, what so they were
Thus *wrought* he hem farre and nere,
And dyd tham wele inough.

We once had a *gospel-wright* (= an evangelist), a *psalm-wright* (= a psalmist), and a *bread-wright* (= a baker). The disuse of the word *wright* reminds me that the word *tree* in the sense of wood (in use in the 16th century) has lost its full import in the compound *axle-tree*. The old saw as 'dead as a *door-nail*' has arisen out of an older expression found in Langland's Piers Plowman, 'as dead as a *door-tree*.' We once had a noun *tree* = wood, and adjective *treen* = wooden. Cp.

By that tyme the lord of the towne
Hadde ordeyned tymbyr redy bowne,
An halle to make of *tre* (wood);
Joseph he was a parti *wright*,
Treen beddes was he wont to make.
(Cursor Mundi, T. l. 12389.)

The tendency to forget the origin of what has become more or less formative may be illustrated by *shamefast* (modest) becoming *shamefaced*, though we still keep intact *steadfast*, but have lost *soothfast*, *root-fast*, and many others.

Another good illustration of this is afforded us by the word *anotherguess*, as used by Horace Walpole (*The Castle of Otranto*, ch. 2),

"My lady Isabella is of *anotherguess* mould than you take her for."

But what is another *guess*? It is neither more nor less

than a corruption of the word *another-gates*, which occurs in Shakespeare and the older Dramatists. Cp. '*another-gates* marriage' in Mother Bombie (p. 210, ed. Dilke). What is *-gates?* It is the genitive (used adverbially) of *gate*, our modern *gait*, a way; so that *another-gates* is exactly *another ways*. The word is of Scandinavian origin, and is of frequent occurrence in Old English, both as an independent word and as a suffix. We find *thus-gates*, *so-gate*, *algates*, *algate*, *how-gate*, *any-gate*, *no-gate*, all in the Cursor Mundi. Cp.

Thys man up-sterte and toke the *gate*.
(Handlynge Synne, l. 5603.)
And *thus-gates* ihesu til him speke.
(C. Mundi, F. l. 12197.)

Yea, by thy faith, wilt thou be there?
Neghbour Prat, bring forth that knave,
And thou, sir friar, if thou wilt *algates* rave.
J. Heywood, The Pardoner and the Friar.
(Dodsley's Old Plays, p. 237, ed. 1874.)

There was also another form which is intermediate between *other-gates* and *other-guess*, and that is *other-guise* (= *other-wise*).

The suffix *-head* or *-hood*, in *manhood*, *godhead*, was once an independent word, signifying *state*, *order*, *condition*. It is found in Early and Middle English, both singly and in composition with another word. Cp.

"Tho thre kinges bitocneð thre *hodes* of bilefulle men, on is *meid-hod*, that other spus-*hod*, the thridde widewe-*hod*."

'Those three kings betoken three states (*or* orders) of believing persons; the first is maiden-*head*, the second spouse-*hood* (*or* marriage), the third widow-*hood*' (O.E. Hom. II. Series).

For a good list of old words in *head* or *hood* see chapter iv. of Trench's *English, Past and Present*.

Perhaps the clearest instance of a word becoming a mere suffix is the termination *-ly*. Thus *god-ly* is the same as *god-like* (O.E. *god-lic*), and *goodly* = *good-like* (O.E *gôd-lic*).

Here we have a clear proof of the fact that agglutination or collocation is the first step towards inflexion.

The word *lic* as a noun originally meant a 'body,' 'form.'

As an adjective it had the same signification as our word *like*. In Early English the guttural was first softened into *-lich*, and then began to disappear, and now *-ly* is so unlike the word from which it has been altered that it is necessary to inform our pupils that it once meant *-like*.

In the Ancren Riwle we read of 'that rotide *lich*' = 'that rotten *corpse*'; 'hire lef*lich lich*' = 'her love*ly* body'; 'a wifmonnes *liche*' = 'a woman's *form*'; cp. '*bicume-liche* wede ben tweire kinne, licham-*liche** and gost-*liche*. 'Become*ly* weeds (garments) are of two kinds, bodi-*ly* and ghost-*ly*' (O.E. Hom. II. p. 95).

It may, by some, be deemed a matter of regret that both the original form and meaning of endings like *-head*, *-dom*, *-ship*, &c., are so obscured by the phonetic change they have undergone in coming down to us.

There is, to a certain extent, however, a positive advantage in the loss of the full meaning of the suffixes alluded to, because they have acquired quite a new power, namely, that of denoting a relation so as to be employed as mere grammatical endings; hence we can talk of *knowingly*, *suspiciously*, &c., without the slightest sense of any incongruity in the meaning of these terms.

The phonetic change, too, is no disadvantage, for the alteration it produces in the external form of a word, is a help to its change of meaning and function. It would be rather inconvenient were we compelled to bear in mind the original sense of the words we use, as *orchard* (herb-garden), *knave* (a boy), &c.

Phonetic transformation, or phonetic decay, plays an important part in fusing two elements together, in integrating them so that they form to the ordinary reader a simple term. To it is due such combinations as *am* for *as-mi*, *which* (= what like), *such* (= so like).

But this fusion is still going on, and is evidently an economizing effort, as when we say *I'll* for *I will*; *shan't* for *shall not*; *don* for *do on*; *doff* for *do off*; *lone* for *all one*: cp. *atone*, *ado*.

The principle of agglutination is not restricted to the com-

* *licham* = *lic-hame*, contains *lic*, a body.

bination of two words only. It would be a difficult matter to illustrate this at any very great length by English examples, but we see the process at work in *topsy-turvy* = *top-si'-to'er-way* = *top-side-that-other-way*. *Good-bye* = God b' w'ye = *God be with you*; *wassail* = *was*[*thou*]*hale* = *be thou hale*, is even shorten'd to *hail*, and reduced to a mere interjection in '*all-hail*.'

The cutting down of a long phrase to a mere exclamation is also seen in the interjection *marry*, which represents the longer phrase in Middle English '*by Mary of heaven*.'

For other instances of fusion compare *n-a-ught*, *a-b-out*, *a-b-af-t*; also *mea domina*, which is shorten'd to *dame*, *dam*, on the one hand, and to *madam* and *m'am* on the other. The Basque and some American languages, to which the name of *polysynthetic* has been given, furnish us with numerous examples of integration or amalgamation. In these languages it is a recognized principle, and it is carried to such an extent that subject, verb, and object are combined so as to appear as one word (cp. English *me-think-s*).

The change from an independent word to a formative one, as the mere sign of a grammatical relation, is easily traceable in less difficult matters than those we have been dealing with.

Have once denoted possession, but it has become also a prefix of the perfect tense. In Middle English it was cut down to *ha* or *a*, and it is often found agglutinated to the passive participle.

The word *of* originally meant *from*. It retains its fuller meaning in *off*, but it is only a prefix or sign of case in the following passage from Macbeth, iv. 1:

> Eye *of* newt and toe *of* frog,
> Wool *of* bat and tongue *of* dog,
> Adder's fork and blindworm's sting,
> Lizard's leg and howlet's wing.

The sign *to* of infinitives (*to* drink, *to* eat) was once a real preposition, as it still is in the gerundial infinitive, as '*a house to let*'; *to let* = *for letting*. It is even further degraded colloquially in such expressions as '*I don't want to*,' where it saves the repetition of a verb.

There is one subject connected with phonetic decay which we must not omit to notice, namely, vowel-change, which, in some classes of words in our language and in other Teutonic tongues, has to a certain extent taken the place of inflexion.

And we may at once say that vowel-change, as we see it in all the Indo-European languages, is no true inflexion. Wherever we meet with it we may be sure that certain suffixes have been lost, which after having caused the vowel-change in the root syllable disappeared.

In *goose* and *gosling*, *stripe* and *stripling*, *dear* and *darling*, *deep* and *depth*, *weep* and *wept*, *husband*, *nostril*, &c., we see that the addition of *-ling*, *-th*, &c. has caused the shortening or contraction of the vowel in *goose*, *stripe*, *dear*, *deep*, *house*, *nose*. Suppose a time should come when, through phonetic decay, the syllable *-ling* should fall away from gosling, then *goose* would be the name of the larger animal and *gŏs* that of the smaller. But it may be said this is altogether suppositious—is there a real instance of such a dropping with its necessary consequence? There is a good example in the word *chick*, which is now used as a diminutive; but if we follow up the history of the word we find there is no such form in the oldest English; what we do find is *chick-en* the diminutive of *cock*, so that *chick* is really formed in the way we have supposed that possibly in time to come a word *gŏs* might arise. This change of *o* to *i* is due to the original vowel of the suffix *-en*. It is not by any means limited to the word *chick-en*. It occurs in *vix-en*, the old feminine of *fox*; *gilden* and to *gild* from the noun *gold*. A similar change is seen in *mouse* and *mice*, *tooth* and *teeth*

We find a like vowel-change in verbs, produced by a lost suffix. Thus *fed*, *led*, &c. from *feed*, *lead*, are exactly parallel with *cock* and *chick*. We have only to go back to Chaucer's time to find the longer forms *fed-dë*, *led-dë*, &c. When the final *e* became silent then the form *fed*, *led*, &c. were consider'd to indicate a past tense by their shorten'd vowel, and in some English Grammars they have been put among the strong verbs! We see the same thing exemplified in other verbs, as from *doom* (O.E. *dom*) was formed (1) *dom-i-*,

an, (2) *dëm-i-an*, (3) *dem-an* = *deem*; thus was formed *feed* from *food*; *tell* from *tale*; *sell* from *sale*; *fall* from *fell*.

German philologists call this vowel-change in *doom* and *deem*, &c. *umlaut*. It may be explained by bearing in mind that the *o* in the original derivative *domian* was affected by the following vowel *i*, and so by anticipation *o* glided to *i* and produced the diphthong *e*.

After the change had taken place then the vowel *suffix* disappeared, just as it has in *fed* and *led*. This change is true of nouns as well as of verbs, and a comparison of the Teutonic languages shows us that *foot*, *feet*, *mouse*, *mice*, &c. are all shorten'd forms of older plurals in which there was a vowel before the suffix *s* by which their original plural was formed.

This vowel-change occurs too in some irregular comparisons of adjectives, as *elder*, *better*. In M.E. we find *bet* = better; *leng* = longer, *streng* = stronger.

There is another change of vowel caused by the dropping out of a sound from the body of a word, causing syncope to take place, as *e'er* = *ever*, *e'en* = *even*, *newt* = *an evet*. Cp. *brain* = O.E. *brægen*; *stile* = O.E. *stigel*; *frail* = *frăgile*, &c. This change helps us to understand the vowel-change in the past tenses of strong verbs, as *held* = O.E. *heold* = Gothic *haihald*.

The dropping out of a consonant sound in the body of a word is often compensated for by the lengthening of the preceding vowel: compare *right* with O.E. *rĭht*, *tooth* with Gothic *tunthus*, *four* with O.E. *fether*, Goth.

So after all in vowel-change there has been no mysterious agency at work, nothing beyond our apprehension, nothing but what is traceable to a known cause. The same may be said of all phonetic changes.

There is no doubt that they are chiefly due to a disposition to economy of effort in utterance. "This disposition (felt in human minds and directing the operations of the human organs of speech) it is, which in all languages abbreviates long words, wears off endings, gets rid of harsh combinations by assimilation, dissimilation, omission, insertion, compensation, and all the other figures of phonology, changes

the tone of vowels and the place and mode of articulation of consonants, brings new alphabetic sounds into existence, lets old ones go into desuetude, and so on through the whole vast list of phonetic changes.

"The ways in which the tendency works itself out are indefinitely various, depending upon the variety of human circumstances and human habits, as well as upon the preferences and caprices which come up in a community in a manner often strange and unaccountable, though never justly awakening the suspicion of an agency apart from and independent of man. Every word which any one of us has learned to utter, he has the power to utter always completely if he will take the pains; but the same carelessness and haste which brings about the vulgarism *pro'able*, and the colloquialism *bos'n*, *cap'n*, which make us say *wig* for *periwig* or *peruke*, *bus* for *omnibus*, *cab* for *cabriolet*, *mob* for *mobile*, tend to transmute gradually the whole aspect of our speech.

"The laws of phonetic mutation in speech are in part the laws of the physical relations of articulate sounds; but only in part, for else the phonetic history of all related tongues would be essentially the same. The other and indeterminable factor in the process is the will of men, in the forms of choice, willingness or aversion to articulating effort, sense for proportion, and euphony, conservative tendency or its opposite, and other the like.

"And this, again, acts under the influence of all the inducements and motives, external and internal, which direct human actions in other respects also. There is just as much and just as little that is arbitrary in the action of men in the form of language as in their action on any other of the elements which go to make up the sum of their culture.

"There is another form of mental inertia which leads to changes in the constitution of words. Something of exertion is involved in the learning and remembering of apparently irregular forms, like *went* from *go*; *brought* from *bring*; or *worse* from *bad*; or *feet* from *foot*. If the great majority of past tenses in English are made by adding *-ed*, of comparatives by *-er*, of plurals by *s*, there is economy of mental effort in making these usages universal, and saying *goed*, *bringed*, *badder*, *foots*.

"These particular alterations, it is true, being in very familiar and frequent words, sound strange and shocking to us; yet their like have borne no insignificant part in the reduction of English to its present shape; and that their root has been in the mind and will of man, admits of no denial or question."

It has been seen that "we do still make compounds very *loose*, as *ink-bottle*, or closer ones, as *inkstand*, *steam-boat*," and we have seen, too, that agglutination leads to fusions like *goodly*, *wisdom*, &c. "And it has probably never enter'd into any one's mind to doubt that such were actually made by us, and that the parts composing them did not grow together by any inherent force, separate from the determining action of the will of English speakers. And if this is the case with our compounds, it cannot be otherwise with the more abundant and varied compounds of the other tongues to which we have referred. Not only have names been thus made, but grammatical forms also—the whole structure of inflective speech has had no other origin. Every formative element, whether prefix or suffix, was once an independent vocable, which first enter'd into composition with another vocable, and then by a succession of changes of form and of meaning, gradually arrived at its final shape and office. This can be proved by clear and acceptable evidence respecting so many formative elements, modern and ancient, that the argument by analogy from these to the rest is of a force which cannot be resisted. The *-ful* and *-less* by which we make adjectives, the *-ly* which form adverbs, *-d* of the past tense of weak verbs, the *m* of *am*, the *-th* or *-s* of loveth or loves, are all demonstrably the relics of independent words, and if these (along with many others which might be instanced), then, by fair inference, all the others. The grammatical apparatus of those languages whose history we best understand is essentially of the same kind with the *-ful* in *helpful*, and to whatever force we attribute the production of the latter, we must attribute that of the former."—(*Oriental and Linguistic Essays*, 1st Series, pp. 306—311.)

LANGUAGE

AND

THE STUDY OF LANGUAGE.

LECTURE I.

Introductory: history, material, objects of linguistic science; plan of these lectures. Fundamental inquiry. How we acquired our speech, and what it was; differences of individual speech. What is the English language; how kept in existence; its changes. Modes and causes of linguistic change.

THOSE who are engaged in the investigation of language have but recently begun to claim for their study the rank and title of a science. Its development as such has been wholly the work of the present century, although its germs go back to a much more ancient date. It has had a history, in fact, not unlike that of the other sciences of observation and induction—for example, geology, chemistry, astronomy, physics—which the intellectual activity of modern times has built up upon the scanty observations and crude inductions of other days. Men have always been learning languages, in greater or less measure; adding to their own mother-tongues the idioms of the races about them, for the practical end of communication with those races, of access to their thought and knowledge. There has, too, hardly been a time when some have not been led on from the acquisition of languages to the study of language. The interest of this precious and wonderful possession of man, at once the sign and the means of his superiority to the rest of the animal

creation, has in all ages strongly impressed the reflecting and philosophical, and impelled them to speculate respecting its nature, its history, and its origin. Researches into the genealogies and affinities of words have exercised the ingenuity of numberless generations of acute and inquiring minds. Moreover, the historical results attainable by such researches, the light cast by them upon the derivation and connection of races, have never wholly escaped recognition. The general objects and methods of linguistic study are far too obviously suggested, and of far too engaging interest, not to have won a certain share of regard, from the time when men first began to inquire into things and their causes.

Nothing, however, that deserved the name of a science was the result of these older investigations in the domain of language, any more than in those of chemistry and astronomy. Hasty generalizations, baseless hypotheses, inconclusive deductions, were as rife in the former department of study as they were in the two latter while yet passing through the preliminary stages of alchemy and astrology. The difficulty was in all the cases nearly the same; it lay in the paucity of observed facts, and in the faulty position which the inquirer assumed toward them. There had been no sufficient collection and classification of phenomena, to serve as the basis of inductive reasoning, for the establishment of sound methods and the elaboration of true results; and along with this, and partly in consequence of it, prejudice and assumption had usurped the place of induction. National self-sufficiency and inherited prepossession long helped to narrow the limits imposed by unfavourable circumstances upon the extent of linguistic knowledge, restraining that liberality of inquiry which is indispensable to the growth of a science. Ancient peoples were accustomed to think each its own dialect the only true language; other tongues were to them mere barbarous jargons, unworthy of study. Modern nations, in virtue of their history, their higher culture, and their Christianity, have been much less uncharitably exclusive; and their reverence for the two classical idioms, the Greek and Latin, and for the language of the Old Testament, the He-

brew, so widened their linguistic horizon as gradually to prepare the way for juster and more comprehensive views of the character and history of human speech. The restless and penetrating spirit of investigation, finally, of the nineteenth century, with its insatiable appetite for facts, its tendency to induction, and its practical recognition of the unity of human interests, and of the absolute value of all means of knowledge respecting human conditions and history, has brought about as rapid a development in linguistic study as in the kindred branches of physical study to which we have already referred. The truth being once recognized that no dialect, however rude and humble, is without worth, or without a bearing upon the understanding of even the most polished and cultivated tongues, all that followed was a matter of course. Linguistic material was gathered in from every quarter, literary, commercial, and philanthropic activity combining to facilitate its collection and thorough examination. Ancient records were brought to light and deciphered; new languages were dragged from obscurity and made accessible to study.

The recognition, not long to be deferred when once attention was turned in the right direction, of the special relationship of the principal languages of Europe with one another and with the languages of south-western Asia—the establishment of the Indo-European family of languages—was the turning-point in this history, the true beginning of linguistic science. The great mass of dialects of the family, descendants of a common parent, covering a period of four thousand years with their converging lines of development, supplied just the ground which the science needed to grow up upon, working out its methods, getting fully into view its ends, and devising the means of their attainment. The true mode of fruitful investigation was discovered; it appeared that a wide and searching comparison of kindred idioms was the way in which to trace out their history, and arrive at a real comprehension of the life and growth of language. Comparative philology, then, became the handmaid of ethnology and history, the forerunner and founder of the science of human speech.

No single circumstance more powerfully aided the onward movement than the introduction to Western scholars of the Sanskrit, the ancient and sacred dialect of India. Its exceeding age, its remarkable conservation of primitive material and forms, its unequalled transparency of structure, give it an indisputable right to the first place among the tongues of the Indo-European family. Upon their comparison, already fruitfully begun, it cast a new and welcome light, displaying clearly their hitherto obscure relations, rectifying their doubtful etymologies, illustrating the laws of research which must be followed in their study, and in that of all other languages. What linguistic science might have become without such a basis as was afforded it in the Indo-European dialects, what Indo-European philology might have become without the help of the Sanskrit, it were idle to speculate: certain it is that they could not have grown so rapidly, or reached for a long time to come the state of advancement in which we now already behold them. As a historical fact, the scientific study of human speech is founded upon the comparative philology of the Indo-European languages, and this acknowledges the Sanskrit as its most valuable means and aid.

But to draw out in detail the history of growth of linguistic science down to the present time, with particular notice of its successive stages, and with due mention of the scholars who have helped it on, does not lie within the plan of these lectures. Interesting as the task might be found, its execution would require more time than we can spare from topics of more essential consequence.* A brief word or two is all we can afford to the subject. Germany is, far more than any other country, the birthplace and home of the study of language. There was produced, at the beginning of this century, the most extensive and important of the preliminary collections of material, specimens of dialects with rude attempt at their classification — the "Mithridates" of Adelung and Vater. There Jacob Grimm gave the first exemplification on a grand scale of the value and power of

* For many interesting details, see Professor Max Müller's Lectures on the Science of Language, first series, third and fourth lectures.

the comparative method of investigation in language, in his grammar of the Germanic dialects, a work of gigantic labour, in which each dialect was made to explain the history and character of all, and all of each. There—what was of yet greater consequence—Bopp laid, in 1816, the foundation of Indo-European comparative philology, by his "Conjugation-system of the Sanskrit Language, as compared with the Greek, Latin, Persian, and German;" following it later with his Comparative Grammar of all the principal languages of the Indo-European family—a work which, more than any other, gave shape and substance to the science. There, too, the labours of such men as the Schlegels, Pott, and Wilhelm von Humboldt, especially of the last-named, extended its view and generalized its principles, making it no longer an investigation of the history of a single department of human speech, but a systematic and philosophical treatment of the phenomena of universal language and their causes. The names of Rask, too, the Danish scholar and traveller, and of Burnouf, the eminent French *savant*, must not be passed unnoticed among those of the founders of linguistic science. Indeed, how ripe the age was for the birth of this new branch of human knowledge, how natural an outgrowth it was of the circumstances amid which it arose, is shown by the fact that its most important methods were worked out and applied, more or less fully, at nearly the same time, by several independent scholars, of different countries—by Rask, Bopp, Grimm, Pott, Burnouf.

A host of worthy rivals and followers of the men whose names we have noted have arisen in all parts of Europe, and even in America, to continue the work which these had begun; and by their aid the science has already attained a degree of advancement that is truly astonishing, considering its so recent origin. Though still in its young and rapidly growing stage, with its domain but just surveyed and only partially occupied, its basis is yet laid broadly and deeply enough, its methods and laws are sure enough, the objects it aims at and the results it is yielding are sufficiently important, in themselves and in their bearing upon other branches of human knowledge, to warrant it in challenging a place

among the sciences, as not the least worthy, though one of the youngest, of their sisterhood, and to give it a claim which may not be disregarded to the attention of every scholar, and of every well-educated person.

The material and subject of linguistic science is language, in its entirety; all the accessible forms of human speech, in their infinite variety, whether still living in the minds and mouths of men, or preserved only in written documents, or carved on the scantier but more imperishable records of brass and stone. It has a field and scope limited to no age, and to no portion of mankind. The dialects of the obscurest and most humbly endowed races are its care, as well as those of the leaders in the world's history. Whenever and wherever a sound has dropped from the lips of a human being, to signalize to others the movements of his spirit, this science would fain take it up and study it, as having a character and office worthy of attentive examination. Every fact of every language, in the view of the linguistic student, calls for his investigation, since only in the light of all can any be completely understood. To assemble, arrange, and explain the whole body of linguistic phenomena, so as thoroughly to comprehend them, in each separate part and under all aspects, is his endeavour. His province, while touching, on the one hand, upon that of the philologist, or student of human thought and knowledge as deposited in literary records, and, on the other hand, upon that of the mere linguist, or learner of languages for their practical use, and while exchanging friendly aid with both of these, is yet distinct from either. He deals with language as the instrument of thought, its means of expression, not its record; he deals with simple words and phrases, not with sentences and texts. He aims to trace out the inner life of language, to discover its origin, to follow its successive steps of growth, and to deduce the laws that govern its mutations, the recognition of which shall account to him for both the unity and the variety of its present manifested phases; and, along with this, to apprehend the nature of language as a human endowment, its relation to thought, its influence upon the development of in-

tellect and the growth of knowledge, and the history of mind and of knowledge as reflected in it.

The exceeding interest of this whole class of inquiries is at first sight manifest, but it grows to our sense in measure as we reflect upon it. We are apt to take language, like so many other things of familiar daily use, as a thing of course, without appreciating the mystery and deep significance which belong to it. We clothe our thoughts without effort or reflection in words and phrases, having regard only to the practical ends of expression and communication, and the power conferred by them: we do not think of the long history, of changes of form and changes of signification, through which each individual vocable employed by us has passed, of the labour which its origination and gradual elaboration has cost to successive generations of thinkers and speakers. We do not meditate upon the importance to us of this capacity of expression, nor consider how entirely the history of man would have been changed had he possessed no such faculty; how little of that enlightenment which we boast would have been ours, if our ancestors had left no spoken memorial of their mental and spiritual acquisitions; how, in short, without speech, the noble endowments of our nature would have remained almost wholly undeveloped and useless. It is, indeed, neither to be expected nor desired that our minds should be continually penetrated with a realizing sense of the marvellous character of language; but we should be inexcusable if we neglected altogether to submit it to such an examination as should make us understand its nature and history, and should prepare our minds to grasp by reflection its whole significance.

These and such as these are the objects most directly aimed at by the scientific student of language. But there are others, of a different character, to which his investigations conduct him hardly less immediately, and which constitute an essential part of the interest which invests them. It is a truth now almost as familiar as, fifty years ago, it would have been deemed new and startling, that language furnishes the principal means of fruitful inquiry into the

deeds and fates of mankind during the ages which precede direct historical record. It enables us to determine, in the main, both the fact and the degree of relationship subsisting among the different divisions of mankind, and thus to group them together into families, the members of which must have once set forth from a common home, with a common character and a common culture, however widely separated, and however unlike in manners and institutions, we may find them to be, when they first come forth into the light of written history. Upon the study of language is mainly founded the science of ethnology, the science which investigates the genealogy of nations. I say, mainly founded, without wishing to depreciate the claims of physical science in this regard: the relation between linguistic and physical science, and their joint and respective value to ethnology, will be made the subject of discussion at a point further on in our inquiries. But language is also pregnant with information respecting races which lies quite beyond the reach of physical science: it bears within itself plain evidences of mental and moral character and capacity, of degree of culture attained, of the history of knowledge, philosophy, and religious opinion, of intercourse among peoples, and even of the physical circumstances by which those who speak it have been surrounded. It is, in brief, a volume of the most varied historical information to those who know how to read it and to derive the lessons it teaches.

To survey the whole vast field of linguistic science, taking even a rapid view of all the facts it embraces and the results derived from their examination, is obviously beyond our power in a brief series of lectures like the present. I shall not, accordingly, attempt a formally systematic presentation of the subject, laying out its different departments and defining their limits and mutual relations. It will, I am persuaded, be more for our profit to discuss in a somewhat general and familiar way the fundamental facts in the life of language, those which exhibit most clearly its character, and determine the method of its study. We shall thus gain an insight into the nature of linguistic evidence, see how it is elicited from the material containing it, and what and how

it has force to prove. We shall, in short, endeavour to arrive at an apprehension of the fundamental principles of the science. But we shall also find occasion to glance at the main results accomplished by its means, seeking to understand what language is and what is its value to man, and to recognize the great truths in human history which it has been instrumental in establishing.

In order to these ends, we shall first take up one or two preliminary questions, the discussion of which will show us how language lives and grows, and how it is to be investigated, and will guide us to an understanding of the place which its study occupies among the sciences. We shall then go on to a more detailed examination and illustration of the processes of linguistic growth, and of the manner in which they produce the incessant changes of form and content which language is everywhere and always undergoing. We shall note, further, the various causes which affect the kind and rate of linguistic change. The result of these processes of growth, in bringing about the separation of languages into dialects, will next engage our attention. This will prepare us for a construction of the group of dialects, and the family of more distantly related languages, of which our own English speech is a member, and for an examination and estimate of the evidence which proves them related. The extent and importance, historical and linguistic, of this family will be set forth, and its course of development briefly sketched. We shall next pass in review the other great families into which the known forms of human speech are divided, noticing their most striking characteristics. Then will be taken up certain general questions, of prime interest and importance, suggested by such a review—as the relative value and authority of linguistic and of physical evidence of race, and the bearing of language upon the ultimate question of the unity or variety of the human species. Finally, we shall consider the origin of language, its relation to thought, and its value as an element in human progress. And a recognition of the aid which it receives in this last respect from written and recorded speech will lead us, by way of appendix, to take a cursory

view of the historical development of the art of writing.

The method which we shall follow will be, as much as possible, the analytic rather than the synthetic, the inquiring rather than the dogmatic. We shall strive, above all things, after clearness, and shall proceed always from that which is well-known or obvious to that which is more recondite and obscure, establishing principles by induction from facts which lie within the cognizance of every well-educated person. For this reason, our examples, whether typical or illustrative, will be especially sought among the phenomena of our own familiar idiom; since every living and growing language has that within it which exemplifies the essential facts and principles belonging to all human speech. We shall also avoid, as far as is practicable, the use of figurative, metaphysical, or technical phraseology, endeavouring to talk the language of plain and homely fact. Not a little of the mystery and obscurity which, in the minds of many, invest the whole subject of language, is due to the common employment respecting it of terms founded on analogies instead of facts, and calling up the things they represent surrounded and dimmed by a halo of fancy, instead of presenting sharply cut outlines and distinct lineaments.

The whole subject of linguistic investigation may be conveniently summed up in the single inquiry, "Why do we speak as we do?" The essential character of the study of language, as distinguished from the study of languages, lies in this, that it seeks everywhere, not the facts, but the reasons of them; it asks, not how we speak, or should speak, but for what reason; pursuing its search for reasons back to the very ultimate facts of human history, and down into the very depths of human nature. To cover the whole ground of investigation by this inquiry, it needs to be proposed in more than one sense; as the most fitting introduction to our whole discussion, let us put it first in its plainest and most restricted meaning: namely, why do we ourselves speak the English as our mother-tongue, or native language, instead of any other of the thousand varying forms of speech current among men? It is indeed a simple question, but to

answer it distinctly and truly will lay the best possible foundation for our further progress, clearing our way of more than one of the imperfect apprehensions, or the misapprehensions, which are apt to encumber the steps of students of language.

The general answer is so obvious as hardly to require to be pointed out: we speak English because we were taught it by those who surrounded us in our infancy and growing age. It is our mother-tongue, because we got it from the lips of our mothers; it is our native language, inasmuch as we were born, not indeed into the possession of it, but into the company of those who already spoke it, having learned it in the same way before us. We were not left to our own devices, to work out for ourselves the great problem of how to talk. In our case, there was no development of language out of our own internal resources, by the reflection of phenomena in consciousness, or however else we may choose to describe it; by the action of a natural impulse, shaping ideas, and creating suitable expression for them. No sooner were our minds so far matured as to be capable of intelligently associating an idea and its sign, than we learned, first to recognize the persons and things about us, the most familiar acts and phenomena of our little world, by the names which others applied to them, and then to apply to them the same names ourselves. Thus, most of us learned first of all to stammer the childish words for 'father' and 'mother,' put, for our convenience, in the accents easiest for unpractised lips to frame. Then, as we grew on, we acquired daily more and more, partly by direct instruction, partly by imitation: those who had the care of us contracted their ideas and simplified their speech to suit our weak capacities; they watched with interest every new vocable which we mastered, corrected our numberless errors, explained what we but half understood, checked us when we used longer words and more ambitious phrases than we could employ correctly or wield adroitly, and drilled us in the utterance of sounds which come hard to the beginner. The kind and degree of the training thus given, indeed, varied greatly in different cases, as did the provision made for the necessary wants of

childhood in respect to other matters; as, for instance, the food, the dress, the moral nurture. Just as some have to rough their way by the hardest through the scenes of early life, beaten, half-starved, clad in scanty rags, while yet some care and provision were wholly indispensable, and no child could have lived through infancy without them—so, as concerns language, some get but the coarsest and most meagre instruction, and yet instruction enough to help them through the first stages of learning how to speak. In the least favourable circumstances, there must have been constantly about every one of us in our earliest years an amount and style of speech surpassing our acquirements and beyond our reach, and our acquisition of language consisted in our appropriating more and more of this, as we were able. In proportion as our minds grew in activity and power of comprehension, and our knowledge increased, our notions and conceptions were brought into shapes mainly agreeing with those which they wore in the minds of those around us, and received in our usage the appellations to which the latter were accustomed. On making acquaintance with certain liquids, colourless or white, we had not to go through a process of observation and study of their properties, in order to devise suitable titles for them; we were taught that these were *water* and *milk*. The one of them, when standing stagnant in patches, or rippling between green banks, we learned to call, according to circumstances and the preference of our instructors, *pool* or *puddle*, and *brook* or *river*. An elevation rising blue in the distance, or towering nearer above us, attracted our attention, and drew from us the staple inquiry "What is that?"—the answer, "A mountain," or "A hill," brought to our vocabulary one of the innumerable additions which it gained in a like way. Along with the names of external sensible objects, we thus learned also that practical classification of them which our language recognizes: we learned to distinguish *brook* and *river; hill* and *mountain; tree, bush, vine, shrub*, and *plant;* and so on, in cases without number. In like manner, among the various acts which we were capable of performing, we were taught to designate certain ones by specific titles: much reproof,

for instance, doubtless made us early understand what was meant by *cry*, *strike*, *push*, *kick*, *bite*, and other names for misdeeds incident to even the best-regulated childhood. How long our own mental states might have remained a confused and indistinct chaos to our unassisted reflection, we do not know; but we were soon helped to single out and recognize by appropriate appellations certain ones among them: for example, a warm feeling of gratification and attachment we were made to signify by the expression *love;* an inferior degree of the same feeling by *like;* and their opposite by *hate.* Long before any process of analysis and combination carried on within ourselves would have given us the distinct conceptions of *true* and *false*, of *good* and *naughty*, they were carefully set before us, and their due apprehension was enforced by faithful admonition, or by something yet more serious. And not only were we thus assisted to an intelligent recognition of ourselves and the world immediately about us, but knowledge began at once to be communicated to us respecting things beyond our reach. The appellations of hosts of objects, of places, of beings, which we had not seen, and perhaps have not even yet seen, we learned by hearing or by reading, and direct instruction enabled us to attach to them some characteristic idea, more or less complete and adequate. Thus, we had not to cross the ocean, and to coast about and traverse a certain island beyond it, in order to know that there is a country *England*, and to hold it apart, by specific attributes, from other countries of which we obtained like knowledge by like means.

But enough of this illustration. It is already sufficiently clear that the acquisition of language was one of the steps of our earliest education. We did not make our own tongue, or any part of it; we neither selected the objects, acts, mental states, relations, which should be separately designated, nor devised their distinctive designations. We simply received and appropriated, as well as we could, whatever our instructors were pleased to set before us. Independence of the general usages of speech was neither encouraged nor tolerated in us; nor did we feel tempted toward independence. Our object was to communicate with those among

whom our lot was cast, to understand them and be understood by them, to learn what their greater wisdom and experience could impart to us. In order to this, we had to think and talk as they did, and we were content to do so. Why such and such a combination of sounds was applied to designate such and such an idea was to us a matter of utter indifference; all we knew or cared to know was that others so applied it. Questions of etymology, of fitness of appellation, concerned us not. What was it to us, for instance, when the answer came back to one of our childish inquiries after names, that the word *mountain* was imported into our tongue out of the Latin, through the Norman French, and was originally an adjective, meaning 'hilly, mountainous,' while *hill* had once a *g* in it, indicating its relationship with the adjective *high*? We recognized no tie between any word and the idea represented by it excepting a mental association which we had ourselves formed, under the guidance, and in obedience to the example, of those about us. We do, indeed, when a little older, perhaps, begin to amuse ourselves with inquiring into the reasons why this word means that thing, and not otherwise: but it is only for the satisfaction of our curiosity; if we fail to find a reason, or if the reason be found trivial and insufficient, we do not on that account reject the word. Thus every vocable was to us an arbitrary and conventional sign: arbitrary, because any one of a thousand other vocables could have been just as easily learned by us and associated with the same idea; conventional, because the one we acquired had its sole ground and sanction in the consenting usage of the community of which we formed a part.

Race and blood, it is equally evident, had nothing to do directly with determining our language. English descent would never have made us talk English. No matter who were our ancestors; if those about us had said *wasser* and *milch*, or *eau* and *lait*, or *hüdōr* and *gala*, instead of *water* and *milk*, we should have done the same. We could just as readily have accustomed ourselves to say *lieben* or *aimer* or *philein*, as *love*, *wahrheit* or *vérité* or *alētheia*, as *truth*. And so in every other case. An American or English mother,

anxious that her child should grow up duly accomplished, gives it a French nurse, and takes care that no English be spoken in its presence; and not all the blood of all the Joneses can save it from talking French first, as if this were indeed its own mother-tongue. An infant is taken alive from the arms of its drowned mother, the only waif cast upon the shore from the wreck of a strange vessel; and it learns the tongue of its foster-parents; no outbreak of natural and hereditary speech ever betrays from what land it derived its birth. The child of a father and mother of different race and speech learns the tongue of either, as circumstances and their choice may determine; or it learns both, and is equally at home in them, hardly knowing which to call its native language. The bands of Africans, stolen from their homes and imported into America, lost in a generation their Congo or Mendi, and acquired from their fellow-slaves a rude jargon in which they could communicate with one another and with their masters. The Babel of dialects brought every year to our shores by the thousands of foreigners who come to seek a new home among us, disappear in as brief a time, or are kept up only where those who speak them herd together in separate communities. The Irish peasantry, mingled with and domineered over by English colonists, governed under English institutions, feeling the whole weight, for good and for evil, of a superior English civilization, incapacitated from rising above a condition of poverty and ignorance without command of English speech, unlearn by degrees their native Celtic tongue, and adopt the dialect of the ruling and cultivated class.

No one, I am confident, can fail to allow that this is a true account of the process by which we acquire our "mother-tongue." Every one recognizes, as the grand advantage connected with the use of language, the fact that in it and by it whatever of truth and knowledge each generation has learned or worked out can be made over into the possession of the generation following. It is not necessary that each of us study the world for himself, in order to apprehend and classify the varied objects it contains, with their qualities and relations, and invent designations for them. This has

been done by those who came before us, and we enter into the fruits of their labours. It is only the first man, before whom every beast of the field and every fowl of the air must present itself, to see what he will call it; whatever he calls any living creature, that is the name thereof, not to himself alone, but to his family and descendants, who are content to style each as their father had done before them.

Our acquisition of English, however, has as yet been but partially and imperfectly described.

In the first place, the English which we thus learn is of that peculiar form or local variety which is talked by our instructors and models. It is, indeed, possible that one may have been surrounded from birth by those, and those only, whose speech is wholly conformed to perfect standards; then it will have been, at least, his own fault if he has learned aught but the purest and most universally accepted English. But such cases cannot be otherwise than rare. For, setting aside the fact that all are not agreed as to whose usage forms the unexceptionable standard, nothing can be more certain than that few, on either side of the ocean, know and follow it accurately. Not many of us can escape acquiring in our youth some tinge of local dialect, of slang characteristic of grade or occupation, of personal peculiarities, even, belonging to our initiators into the mysteries of speech. These may be mere inelegancies of pronunciation, appearing in individual words or in the general tone of utterance, like the nasal twang, and the flattening of *ou* into *ău*, which common fame injuriously ascribes to the Yankee; or they may be ungrammatical modes of expression, or uncouth turns and forms of construction; or favourite recurrent phrases, such as *I guess, I calculate, I reckon, I expect, you know*, each of which has its own region of prevalence; or colloquialisms and vulgarisms, which ought to hide their heads in good English society; or words of only dialectic currency, which the general language does not recognize. Any or all of these or of their like we innocently learn along with the rest of our speech, not knowing how to distinguish the evil from the good. And often, as some of us know to our cost, errors and infelicities are thus so thoroughly

wrought into our minds, as parts of our habitual modes of expression, that not all the care and instruction of after life can rid us of them. How many men of culture and eminent ability do we meet with, who exhibit through life the marks of a defective or vicious early training in their native tongue! The dominion of habit is not less powerful in language than in anything else that we acquire and practise. It is not alone true that he who has once thoroughly learned English is thereby almost disqualified from ever attaining a native facility, correctness, and elegance in any foreign tongue; one may also so thoroughly learn a bad style of English as never to be able to ennoble it into the best and most approved form of his native speech. Yet, with us, the influences which tend to repress and eradicate local peculiarities and individual errors are numerous and powerful. One of the most effective among them is school instruction. It is made an important part of our education to learn to speak and write correctly. The pupil of a faithful and competent instructor is taught to read and pronounce, to frame sentences with the mouth and with the pen, in a manner accordant with that which is accepted among the well-educated everywhere. Social intercourse is a cultivating agency hardly less important, and more enduring in its action; as long as we live, by associating with those who speak correctly, we are shown our own faults, and at the same time prompted and taught to correct them. Reading—which is but another form of such intercourse—consultation of authorities, self-impelled study in various forms, help the work. Our speech is improved and perfected, as it was first acquired, by putting ourselves in the position of learners, by following the example of those who speak better than we do. He who is really in earnest to complete his mastery of his mother-tongue may hope for final success, whatever have been his early disadvantages; just as one may acquire a foreign tongue, like German or French, with a degree of perfection depending only on his opportunities, his capacity, his industry, and the length of time he devotes to the study.

Again, even when the process of training which we have

described gives general correctness and facility, it is far from conferring universal command of the resources of the English tongue. This is no grand indivisible unity, whereof the learner acquires all or none; it is an aggregation of particulars, and each one appropriates more or less of them, according to his means and ability. The vocabulary which the young child has acquired the power to use is a very scanty one; it includes only the most indispensable part of speech, names for the commonest objects, the most ordinary and familiar conceptions, the simplest relations. You can talk with a child only on a certain limited range of subjects; a book not written especially for his benefit is in great part unintelligible to him: he has not yet learned its signs for thought, and they must be translated into others with which he is acquainted; or the thought itself is beyond the reach of his apprehension, the statement is outside the sphere of his knowledge. But in this regard we are all of us more or less children. Who ever yet got through learning his mother-tongue, and could say, "The work is done?" The encyclopedic English language, as we may term it, the English of the great dictionaries, contains more than a hundred thousand words. And these are only a selection out of a greater mass. If all the signs for thought employed for purposes of communication by those who have spoken and who speak no other tongue than ours were brought together, if all obsolete, technical, and dialectic words were gathered in, which, if they are not English, are of no assignable spoken tongue, the number mentioned would be vastly augmented. Out of this immense mass, it has been reckoned by careful observers that from three to five thousand answer all the ordinary ends of familiar intercourse, even among the cultivated; and a considerable portion of the English-speaking community, including the lowest and most ignorant class, never learn to use even so many as three thousand: what they do acquire, of course, being, like the child's vocabulary, the most necessary part of the language, signs for the commonest and simplest ideas. To a nucleus of this character, every artisan, though otherwise uninstructed, must add the technical language of his own craft—names for tools, and

processes, and products which his every-day experience makes familiar to him, but of which the vast majority, perhaps, of those outside his own line of life know nothing. Ignorant as he may be, he will talk to you of a host of matters which you shall not understand. No insignificant part of the hundred-thousand-word list is made up of selections from such technical vocabularies. Each department of labour, of art, of science, has its special dialect, fully known only to those who have made themselves masters in that department. The world requires of every well-informed and educated person a certain amount of knowledge in many special departments, along with a corresponding portion of the language belonging to each: but he would be indeed a marvel of many-sided learning who had mastered them all. Who is there among us that will not find, on every page of the comprehensive dictionaries now in vogue, words which are strange to him, which need defining to his apprehension, which he could not be sure of employing in the right place and connection? And this, not in the technical portions only of our vocabulary. There are words, or meanings of words, no longer in familiar use, antiquated or obsolescent, which yet may not be denied a place in the present English tongue. There are objects which almost never fall under the notice of great numbers of people, or of whole classes of the community, and to whose names, accordingly, when met with, these are unable to attach any definite idea. There are cognitions, conceptions, feelings, which have not come up in the minds of all, which all have not had occasion and acquired power to express. There are distinctions, in every department of thought, which all have not learned to draw and designate. Moreover, there are various styles of expression for the same thing, which are not at every one's command. One writer or speaker has great ease and copiousness of diction; for all his thoughts he has a variety of phrases to choose among; he lays them out before us in beautiful elaboration, in clear and elegant style, so that to follow and understand him is like floating with the current. Another, with not less wealth of knowledge and clearness of judgment, is cramped and awkward in his use of language;

he puts his ideas before us in a rough and fragmentary way; he carries our understandings with him, but only at the cost of labour and pains on our part. And though he may be able to comprehend all that is said by the other, he has not in the same sense made the language his own, any more than the student of a foreign tongue who can translate from it with facility, but can express himself in it only lamely. Thus the infinite variety of the native and acquired capacity of different individuals comes to light in their idiom. It would be as hard to find two persons with precisely the same limits to their speech, as with precisely the same lineaments of countenance.

Once more, not all who speak the same tongue attach the same meaning to the words they utter. We learn what words signify either by direct definition or by inference from the circumstances in which they are used. But no definition is or can be exact and complete; and we are always liable to draw wrong inferences. Children, as every one knows, are constantly misapprehending the extent of meaning and application of the signs they acquire. Until it learns better, a child calls every man *papa;* having been taught the word *sky*, it calls the ceiling of a room the *sky;* it calls a donkey or a mule a *horse*—and naturally enough, since it has had to apply the name *dog* to creatures differing far more than these from one another. And so long as the learning of language lasts, does the liability to such error continue. It is a necessity of the case, arising out of the essential nature of language. Words are not exact models of ideas; they are merely signs for ideas, at whose significance we arrive as well as we can; and no mind can put itself into such immediate and intimate communion with another mind as to think and feel precisely with it. Sentences are not images of thoughts, reflected in a faultless mirror; nor even photographs, needing only to have the colour added: they are but imperfect and fragmentary sketches, giving just outlines enough to enable the sense before which they are set up to seize the view intended, and to fill it out to a complete picture; while yet, as regards the completeness of the filling out, the details of the work,

and the finer shades of colouring, no two minds will produce pictures perfectly accordant with one another, nor will any precisely reproduce the original.

The limits of variation of meaning are, of course, very different in different classes of words. So far as these are designations of definite objects, cognizable by the senses, there is little danger of our seriously misapprehending one another when we utter them. Yet, even here, there is room for no trifling discordance, as the superior knowledge or more vivid imagination of one person gives to the idea called up by a name a far richer content than another can put into it. Two men speak of the *sun*, with mutual intelligence: but to the one he is a mere ball of light and heat, which rises in the sky every morning, and goes down again at night; to the other, all that science has taught us respecting the nature of the great luminary, and its influence upon our little planet, is more or less distinctly present every time he utters its name. The word *Pekin* is spoken before a number of persons, and is understood by them all: but some among them know only that it is the name of an immense city in Asia, the capital of the Chinese empire; others have studied Chinese manners and customs, have seen pictures of Chinese scenery, architecture, dress, occupation, and are able to tinge the conception which the word evokes with some fair share of a local colouring; another, perhaps, has visited the place, and its name touches a store of memories, and brings up before his mind's eye a picture vivid with the hues of truth. I feel a tolerable degree of confidence that the impressions of colour made on my sense are the same with those made upon my friend's sense, so that, when we use the words *red* or *blue*, we do not mean different things: and yet, even here, it is possible that one of us may be afflicted with some degree of colour-blindness, so that we do not apprehend the same shades precisely alike. But just so is every part of language liable to be affected by the personality of the speaker; and most of all, where matters of more subjective apprehension are concerned. The voluptuary, the passionate and brutal, the philosophic, and the sentimental, for instance, when they speak of *love* or of *hate*,

mean by no means the same feelings. How pregnant with sacred meaning are *home*, *patriotism*, *faith* to some, while others utter or hear them with cool indifference! It is needless, however, to multiply examples. Not half the words in our familiar speech would be identically defined by any considerable number of those who employ them every day. Nay, who knows not that verbal disputes, discussions turning on the meaning of words, are the most frequent, bitter, and interminable of controversies?

Clearly, therefore, we are guilty of no paradox in maintaining that, while we all speak the English language, the English of no two individuals among us is precisely the same: it is not the same in form; it is not the same in extent; it is not the same in meaning.

But what, then, is the English language? We answer: It is the immense aggregate of the articulated signs for thought accepted by, and current among, a certain vast community which we call the English-speaking people, embracing the principal portion of the inhabitants of our own country and of Great Britain, with all those who elsewhere in the world talk like them. It is the sum of the separate languages of all the members of this community. Or—since each one says some things, or says them in a way, not to be accepted as in the highest sense English—it is their average rather than their sum; it is that part of the aggregate which is supported by the usage of the majority; but of a majority made in great part by culture and education, not by numbers alone. It is a mighty region of speech, of somewhat fluctuating and uncertain boundaries, whereof each speaker occupies a portion, and a certain central tract is included in the portion of all: there they meet on common ground; off it, they are strangers to one another. Although one language, it includes numerous varieties, of greatly differing kind and degree: individual varieties, class varieties, local varieties. Almost any two persons who speak it may talk so as to be unintelligible to each other. The one fact which gives it unity is, that all who speak it may, to a considerable extent, and on subjects of the most general and pressing interest, talk so as to understand one another.

How this language is kept in existence is clearly shown by the foregoing exposition. It is preserved by an uninterrupted tradition. Each generation hands it down to the generation following. Every one is an actor in the process; in each individual speaker the language has, as we may say, a separate and independent existence, as has an animal species in each of its members; and each does what in him lies to propagate it—that is to say, his own part of it, as determined in extent and character by the inherent and acquired peculiarities of his nature. And, small as may be the share of the work which falls to any one of us, the sum of all the shares constitutes the force which effects the transmission of the whole language. In the case of a tongue like ours, too, these private labours are powerfully aided and supplemented by the influence of a literature. Each book is, as it were, an undying individual, with whom, often, much larger numbers hold intercourse than any living person can reach, and who teaches them to speak as he speaks. A great body of literary works of acknowledged merit and authority, in the midst of a people proud and fond of it, is an agent in the preservation and transmission of any tongue, the importance of which cannot easily be over-estimated: we shall have to take it constantly into account in the course of our further inquiries into the history of language. But each work is, after all, only a single person, with his limitations and deficiencies, and with his restricted influence. Even Shakspeare, with his unrivalled wealth and variety of expression, uses but about fifteen thousand words, and Milton little more than half so many—mere fragments of the encyclopedic English tongue. The language would soon be shorn of no small part of its strength, if placed exclusively in the hands of any individual, or of any class. Nothing less than the combined effort of a whole community, with all its classes and orders, in all its variety of characters, circumstances, and necessities, is capable of keeping in life a whole language.

But, while our English speech is thus passed onward from generation to generation of those who learn to speak it, and, having learned themselves, teach others, it does not remain

precisely the same; on the contrary, it is undergoing all the time a slow process of modification, which is capable of rendering it at length another language, unintelligible to those who now employ it. In order to be convinced of this, we have only to cast an eye backward over its past history, during the period for which we have its progress recorded in contemporary documents. How much is there in our present familiar speech which would be strange and meaningless to one of Elizabeth's court! How much, again, do we find in any of the writers of that period—in Shakspeare, for instance—which is no longer good current English! phrases and forms of construction which never fall from our lips now save as we quote them; scores of words which we have lost out of memory, or do not employ in the sense which they then bore. Go back yet farther, from half-century to half-century, and the case grows rapidly worse; and when we arrive at Chaucer and Gower, who are separated from us by a paltry interval of five hundred years, only fifteen or twenty descents from father to son, we meet with a dialect which has a half-foreign look, and can only be read by careful study, with the aid of a glossary. Another like interval of five hundred years brings us to the Anglo-Saxon of King Alfred, which is absolutely a strange tongue to us, not less unintelligible than the German of the present day, and nearly as hard to learn. And yet, we have no reason to believe that any one of those thirty or forty generations of Englishmen through whom we are descended from the contemporaries of King Alfred was less simply and single-mindedly engaged to transmit to its children the same language which it had received from its ancestors than is the generation of which we ourselves form a part. It may well be that circumstances were less favourable to some of them than to us, and that our common speech stands in no danger of suffering in the next thousand years a tithe of the change which it has suffered in the past thousand. But the forces which are at work in it are the same now that they have always been, and the effects they are producing are of the same essential character: both are inherent in the nature of lan-

guage, and inseparable from its use. This will be made plain to us by a brief inquiry.

The most rapid and noticeable mode of change in our language is that which is all the time varying the extent and meaning of its vocabulary. English speech exists in order that we may communicate with one another respecting those things which we know. As the stock of words at the command of each individual is an approximate measure of the sum of his knowledge, so the stock of words composing a language corresponds to what is known in the community; the objects it is familiar with, the distinctions it has drawn, all its cognitions and reasonings, in the world of matter and of mind, must have their appropriate expression. That speech should signify more than is in the minds of its speakers is obviously impossible; but neither must it fall short of indicating what they think. Now the sum of knowledge in every community varies not a little from generation to generation. Every trade and handicraft, every art, every science, is constantly changing its materials, its processes, and its products; and its technical dialect is modified accordingly, while so much of the results of this change as affects or interests the general public finds its way into the familiar speech of everybody. As our material condition varies, as our ways of life, our institutions, private and public, become other than they have been, all is necessarily reflected in our language. In these days of railroads, steamboats, and telegraphs, of sun-pictures, of chemistry and geology, of improved wearing stuffs, furniture, styles of building, articles of food and luxury of every description, how many words and phrases are in every one's mouth which would be utterly unintelligible to the most learned man of a century ago, were he to rise from his grave and walk our streets! It is, of course, in its stores of expression for these more material objects and relations, and for the details of technical knowledge, that language changes most notably, because it is with reference to these that the necessity for change especially arises. The central and most indispensable substance of every language is made up of designations for things, properties, acts, the

apprehension of which is nearly as old as humanity itself, which men learned to name as soon as they learned to talk at all, and whose names are not liable to pass away or become superseded. The words *red*, *green*, *blue*, *yellow*, or their equivalents, go back to the earliest period of human speech; it is when some new and delicate shades of colour, like the aniline dyes, are invented, that appellations must be sought for them, and may be found even among names of localities, as Magenta, Solferino, to which the circumstances of the time have given a sudden notoriety. Any two rustics, from the time of Adam to the present, could talk with one another, with all the particularity which their practical ends required, of earth and rock, of pebbles and stones, of sand and gravel, of loam and clay: but, since the beginning of the present century, the mineralogist and geologist have elicited a host of new facts touching the history and constitution of the earth's crust and the materials of which this is made up, have arranged and classified its strata and their contents, have brought to light numberless relations, of cause and effect, of succession, of origin, date, and value, which had hitherto lain hidden in it; and, to express these, they have introduced into English speech a whole technical vocabulary, and one which is still every year extending and changing. So it is with botany; so with metaphysics; so with every other branch of science and art. And though the greater part of the technical vocabularies remains merely technical, understood and employed only by special students in each branch, yet the common speech is not entirely unaffected by them. Some portion of the results of the advancement in knowledge made by the wise and learned reaches even the lowest, or all but the very lowest, and is expressed in their language; and it thus becomes a part of the fundamental stock of ideas which constitute the heritage of each generation, which every child is taught to form and use. Language, in short, is expanded and contracted in precise adaptation to the circumstances and needs of those who use it; it is enriched or impoverished, in every part, along with the enrichment or impoverishment of their minds.

This is, as I have said, the most noticeable mode of change

in language, and also the most natural, inevitable, and legitimate. Even the bigoted purist cannot object to it, or wish it otherwise: conservatism here would be the conservatism of ignorance, opposing itself to the progress of civilization and enlightenment. Along with it, too, comes its natural counterpart, the dropping out of use and out of memory of words and meanings of words and phrases which circumstances have made it no longer desirable to maintain in existence; which denote the things of a by-gone time, or, by the substitution of more acceptable expressions, have become unnecessary and otiose.

But there are also all the time going on in our language changes of another and a more questionable character, changes which affect the form rather than the content of speech, and are in a sense unnecessary, and therefore stoutly opposed by the authority of exact tradition; yet which have hitherto shown themselves not less inevitable than the others. We have seen that the transmission of language is by tradition. But traditional transmission is by its inherent nature defective. If a story cannot pass a few times from mouth to mouth and maintain its integrity, neither can a word pass from generation to generation and keep its original form. Very young children, as every one knows, so mutilate their words and phrases that only those who are most familiar with them can understand what they say. But even an older child, who has learned to speak in general with tolerable correctness, has a special inaptness to utter a particular sound, and either drops it altogether or puts another and nearly related one in its place. There are certain combinations of consonants which it cannot manage, and has to mouth over into more pronounceable shape. It drops a syllable or two from a long and cumbrous word. It omits endings and confounds forms together: *me*, for instance, has to do duty in its usage for *me*, *my*, and *I*; and *eat*, to stand for all persons, tenses, and numbers of the verb. Or, again, having learned by prevailing experience that the past sense in a verb is signified by the addition of a *d*, it imagines that, because it says *I loved*, it must also say *I bringed*; or else, perhaps, remembering *I sang* from *I sing*, it says *I brang*.

It says *foots* and *mouses*; it says *gooder* and *goodest*; it confounds *sit* and *set*, *lie* and *lay* (in which last blunders, unfortunately, it is supported by the example of too many among the grown-up and educated). Care, on its own part and on that of its instructors, corrects by degrees such childish errors; but this care is often wanting or insufficient, and it grows up continuing still to speak bad English. Moreover, as we have already seen, not each child only, but each man, to his dying day, is a learner of his native tongue; nor is there any one who is not liable, from carelessness or defective instruction, to learn a word or phrase incorrectly, or to reproduce it inaccurately. For these reasons there always lies, in full vigour and currency, in the lower strata of language-users, as we may term them—among the uneducated or half-educated—a great host of deviations from the best usage, offences against the propriety of speech, kept down in the main by the controlling influence of good speakers, yet all the time threatening to rise to the surface, and now and then succeeding in forcing their way up, and compelling recognition and acceptance from even the best authorities.

Of this origin are the class of changes in language which we are at present considering. They are, in their inception, inaccuracies of speech. They attest the influence of that immense numerical majority among the speakers of English who do not take sufficient pains to speak correctly, but whose blunders become finally the norm of the language. They are mainly the results of two tendencies, already illustrated in the instances we have given: first, to make things easy to our organs of speech, to economize time and effort in the work of expression; second, to get rid of irregular and exceptional forms, by extending the prevailing analogies of the language. Let us look at a few examples.

Our written words are thickly sown with silent letters, which, as every one knows, are relics of former modes of pronunciation, once necessary constituents of spoken language, but gradually dropped, because it was easier to do without them. Instances are *knight*, *calm*, *psalm*, *would*, *doubt*, *plough*, *thought*, *sword*, *chestnut*. If we will but carry

our investigations further back, beyond the present written form of our words, we shall light upon much more extraordinary cases of mutilation and abbreviation. Thus, to take but a single, though rather striking, example, our *alms* is the scanty relic of the long Greek vocable *eleëmosunē*. All the monosyllables, in fact, of which especially the Anglo-Saxon portion of our daily speech is in so great measure composed, are relics of long polysyllabic forms, usual at an earlier stage of the language. Some words are but just through, or even now passing through, a like process. In *often* and *soften*, good usage has taken sides with the corruption which has ejected the *t*, and accuses of being old-fashioned or affectedly precise the large and respectable class who still pronounce that letter; while, on the other hand, it clings to the *t* of *captain*, and stigmatizes as vulgar those who presume to say *cap'n*.

Again, it is the prevailing English custom to accent a noun of two syllables on its first syllable; hosts of nouns of French origin have had their native accent altered, in order to conform them to this analogy. Such changes have been going on at every period in the history of our tongue: in Pope, in Milton, in Shakspeare, in Chaucer, you will find examples of their action, in ever increasing numbers as you go backward from the present time. Nor are they yet over: there is *ally*, which all the authorities agree in pronouncing *allȳ*, while prevailing popular usage, on both sides of the Atlantic, persists in favouring *álly;* and it is not unlikely that, in the end, the people will prove too strong for the orthoëpists, as they have done so many times before.

When our Bible translation was made, the verb *speak* had a proper imperfect form, *spake:* a well-educated Englishman would no more have written *he spoke* than *he come and done it*. But, just as the ill-instructed and the careless now-a-days are often guilty of these last two blunders, so then, undoubtedly, large numbers habitually said *spoke* for *spake;* until, at last, the struggle against it was given up as hopeless; and no one now says *I spake* save in conscious imitation of Biblical style.

At the same period, but two centuries and a half ago, the

English language contained no such word as *its*. *His* had been, in the old Anglo-Saxon and ever since, the common possessive of *he* and *it* (A.-S., *hit*) ; it belonged to the latter no less than to the former. But almost all the possessive cases in the language were formed by adding *s* to the nominative, and *his* wore the aspect of being so formed from *he*, and of having nothing to do with *it*. Why not, then, form a new possessive in like manner for *it* itself? This was a question which very probably suggested itself to a great many minds about the same time, and the word *its* may have sprung up in a hundred places at once, and propagated itself, under the ban of the purists of the day, who frowned upon it, pronounced it "as bad as *she's*, for *her*, would be," and carefully avoided its use; until at last its popularity and evident desirableness caused it to be universally adopted and recognized as proper. And, at the present time, few of us read our Bibles so curiously as to have discovered that they contain no such word as *its*, from Genesis to Revelation.

The Anglo-Saxon employed *ye* (*ge*) as subject of a verb, and *you* (*eow*) as object, and the early English was careful to make the same distinction. Nor is it yet entirely lost; but the use of *ye* now belongs to a solemn style only, and *you* has been set up as subject not less than object. There was a time when *you are* for *ye are*, and yet more for *thou art*, would have been as offensive to the ear of a correct English speaker as is now the *thee is* of the Quaker.

Not a few of the irregular verbs which our language formerly contained have been in later usage assimilated to the more numerous class, and conjugated regularly. Take as examples *help*, of which the ancient participle *holpen*, instead of *helped*, is found still in our Bibles; and *work*, which has gained a modern preterit and participle, *worked*, although the older form, *wrought*, is also retained in use, with a somewhat altered and specialized signification.

Here are changes of various kind and value, though all tracing their origin to the same tendencies. Words change their shape without losing their identity; old forms, old

marks of distinction, are neglected and lost: some of these could well be spared, but others were valuable, and their relinquishment has impaired the power of expression of the language; while new forms are created, and new marks of distinction are adopted into general use, and made part and parcel of English speech.

So full and abundant illustration of this department of change in language as might be desired cannot be drawn from facts with which we are all familiar, because, for some time past, the conservative forces have been so powerful in our mother-tongue, and the accuracy of historical transmission so strict, that what is now good English has, in the main, long been such, and is likely long to continue such. Its alteration goes on so slowly that we hardly perceive it in progress, and it is only as we compare the condition of the language at a given time with that which it shows at the distance of a considerable interval, earlier or later, that they come clearly to light. The English is, indeed, among all cultivated tongues, the one which has suffered, under the influences which we have been describing, the most thorough and pervading change of its grammar and vocabulary; but the greater part of this change occurred at a certain definite period, and from the effect of circumstances which are well known. Our English ancestors, between the time of Alfred and that of Chaucer, endured the irruption and conquest of a French-speaking people, the Normans—just as did the Irish, at a later day, that of the English. That the Saxons did not, like the Irish, gradually relinquish their own tongue, and learn to talk French altogether, was owing to their advanced culture and superior independence of character: after a long time of confusion and mutual unintelligibility, as every one knows, the Saxons gave up a part of their vocabulary for that of the Normans, and the Normans a part of theirs, with nearly all their grammar, for those of the Saxons, and our present composite dialect, with its meagre system of grammatical inflections, was the result. The example is an extreme one of the transformation which a language may be made to undergo in the lapse of a few

generations, at the bidding of imperious circumstances; as the present stability of the same language is an extreme example of what favouring circumstances can do to prevent change, and maintain the integrity of speech.

The facts and conditions which we have been considering are of no exceptional character: on the contrary, they are common to all the forms of speech current among the sons of men. Throughout the world, the same description, in its essential features, will be found to hold good. Every spoken language is a congeries of individual signs, called words; and each word (with the rare exception of the actual additions made by individuals to language, of which we shall take account later) was learned by every person who employs it from some other person who had employed it before him. He adopted it as the sign of a certain idea, because it was already in use by others as such. Inner and essential connection between idea and word, whereby the mind which conceives the one at once apprehends and produces the other, there is none, in any language upon earth. Every existing form of human speech is a body of arbitrary and conventional signs for thought, handed down by tradition from one generation to another, no individual in any generation receiving or transmitting the whole body, but the sum of the separate givings and takings being effective to keep it in existence without essential loss. Yet the process of traditional transmission always has been, is now, and will ever continue to be, in all parts of the world, an imperfect one: no language remains, or can remain, the same during a long period of time. Growth and change make the life of language, as they are everywhere else the inseparable accompaniment and sign of life. A language is living, when it is the instrument of thought of a whole people, the wonted means of expression of all their feelings, experiences, opinions, reasonings; when the connection between it and their mental activity is so close that the one reflects the other, and that the two grow together, the instrument ever adapting itself to the uses which it is to subserve. The ways in which this adaptation takes place, and the causes which

accelerate or retard the inevitable change of language, have been already in part glanced at, and will come up for more detailed examination hereafter; it is sufficient at present that we fully recognize the fact of change. It is the fundamental fact upon which rests the whole method of linguistic study.

LECTURE II.

Nature of the force which produces the changes of language; its modes of action. Language an institution, of historical growth; its study a moral science. Analogies of linguistic science with the physical sciences. Its methods historical. Etymology its foundation. Analysis of compound words. Genesis of affixes. Nature of all words as produced by actual composition.

In the preceding lecture, after a very brief survey of the history and objects of linguistic science, we entered upon an inquiry into the means by which we had become possessed of our mother-tongue, an inquiry intended to bring out to our view the mode of transmission and preservation of language in general. And we saw that it is the work of tradition; that each generation passes along to the generation succeeding, with such faithfulness as the nature of the case permits, the store of words, phrases, and constructions which constitute the substance of a spoken tongue. But we also saw that the process of transmission is uniformly an imperfect one; that it never succeeds in keeping any language entirely pure and unaltered: on the contrary, language appeared to us as undergoing, everywhere and always, a slow process of modification, which in course of time effects a considerable change in its constitution, rendering it to all intents and purposes a new tongue. This was illustrated from the history of our English speech, which, by gradual and accumulated alterations made in it, during the past thousand years, by the thirty or forty generations through whose mouths it has passed, has grown from the Anglo-Saxon of King Alfred, through a succession of inter-

mediate phases, into what it is at present. Before, now, we go on to examine in detail the processes of linguistic change, setting forth more fully their causes and modes of action, and exhibiting their results upon a more extended scale, we have to draw from what has been already said one or two important conclusions, touching the nature of the force by which those processes are carried on, and the character, and place among the sciences, of the study which undertakes their investigation.

And, in the first place, we see, I think, from our examination of the manner in which language is learned and taught, in which its life is kept up, what is meant when we speak and write of it as having an independent or objective existence, as being an organism or possessing an organic structure, as having laws of growth, as feeling tendencies, as developing, as adapting itself to our needs, and so on. All these are figurative expressions, the language of trope and metaphor, not of plain fact; they are wholly unobjectionable when consciously employed in their proper character, for the sake of brevity or liveliness of delineation; they are only harmful when we allow them to blind us to the real nature of the truths they represent. Language has, in fact, no existence save in the minds and mouths of those who use it; it is made up of separate articulated signs of thought, each of which is attached by a mental association to the idea it represents, is uttered by voluntary effort, and has its value and currency only by the agreement of speakers and hearers. It is in their power, subject to their will; as it is kept up, so is it modified and altered, so may it be abandoned, by their joint and consenting action, and in no other way whatsoever.

This truth is not only often lost from view by those who think and reason respecting language, but it is also sometimes explicitly denied, and the opposite doctrine is set up, that language has a life and growth independent of its speakers, with which men cannot interfere. A recent popular writer * asserts that, "although there is a continu-

* Professor Max Müller, in his Lectures on the Science of Language, first series, second lecture.

ous change in language, it is not in the power of man either to produce or to prevent it: we might think as well of changing the laws which control the circulation of our blood, or of adding an inch to our height, as of altering the laws of speech, or inventing new words according to our own pleasure." Then, in order to establish the truth of this opinion, he goes on to cite a couple of historical instances, in which two famous emperors, Tiberius of Rome and Sigismund of Germany, committed blunders in their Latin, and were taken to task and corrected by humble grammarians, who informed their imperial majesties that, however great and absolute their power might be, it was not competent to make an alteration in the Latin language. The argument and conclusion we may take to be of this character: If so high and mighty a personage as an emperor could not do so small a thing as alter the gender and termination of a single word—not even, as Sigismund attempted, in a language which was dead, and might therefore be supposed incapable of making resistance to the indignity—much less can any one of inferior consideration hope to accomplish such a change, or any other of the changes, of greater or less account, which make up the history of speech: therefore, language is incapable of alteration by its speakers.

The utter futility of deriving such a doctrine from such a pair of incidents, or from a score, a hundred, or a thousand like them, is almost too obvious to be worth the trouble of pointing out. Against what authority more mighty than their own did these two emperors offend? Simply against the immemorial and well-defined usage of all who wrote and had ever written Latin—nothing more and nothing less. High political station does not confer the right to make and unmake language; a sovereign's grammatical blunders do not become the law of speech to his subjects, any more than do those of the private man. Each individual is, in a way, constantly trying experiments of modification upon his mother-tongue, from the time when, as a child, he drops sounds and syllables which it does not suit his convenience to pronounce, and frames inflections upon mistaken analogies, to that when, as a man, he is guilty of

slang, vulgarisms, and bad grammar, or indulges in mannerisms and artificial conceits, or twists words out of their true uses, from ignorance or caprice. But his individual influence is too weak to make head against the consenting usage of the community; his proposals, unless for special reasons, are passed over unnoticed, and he is forced to conform his speech to that of the rest; or, if he insist upon his independence, he is contemned as a blunderer, or laughed at as a humourist.

That an alteration should have been made at the time of Sigismund in any item of Latin grammar, either by the emperor himself, or by all the potentates and learned men of Christendom, was an impossibility. For the language was a dead one; its proprieties of speech were no longer dependent upon the sanction of present usage, but upon the authority of unchanging models. Much that we say is good English, though Shakspeare and Milton knew it not; nothing can be good Latin, unless it be found in Cicero and Virgil, or their compeers. And even under Tiberius, the case was nearly the same: the great authors whose example makes the law of Latin speech had already lived and written; and any deviation from their usage would have been recognized by all coming time as a later corruption. Hence, even had that emperor's blunder been accepted and slavishly imitated by his courtiers, his army, and his subjects at large, their consent could have made it good second-rate Latin only; it might have become the very best usage in the later Italian, French, and Spanish, but it would always have been rejected and avoided by the strict classicists. And all this, not for the reason that man has no power over language, but precisely for the contrary reason, that he has all power over it—that men's usage makes language. He, accordingly, who can direct usage can make or alter language. In this way only can exalted rank confer authority over speech: it can give a more powerful impulse toward that general acceptance and currency which anything must win in order to be language. There are instances on record in which the pun of a monarch has changed for all time the form of a word. Ethnologists well know that the name of

the so-called "Tartar" race is properly *Tatar*, and they are now endeavouring to restore this, its correct orthography. The intrusion of the *r* is accounted for in the following manner. When, in the reign of St Louis of France, the hordes of this savage race were devastating eastern Europe, the tale of their ravages was brought to the pious king, who exclaimed with horror: "Well may they be called *Tartars*, for their deeds are those of fiends from *Tartarus*." The appositeness of the metamorphosed appellation made it take, and from that time French authors—and, after their example, the rest of Europe—have called the *Tatars* "Tartars." Whether the story is incontestably authentic or not is of small consequence: any one can see that it might be true, and that such causes may have produced such effects times innumerable.

The speakers of language thus constitute a republic, or rather, a democracy, in which authority is conferred only by general suffrage and for due cause, and is exercised under constant supervision and control. Individuals are abundantly permitted to make additions to the common speech, if there be reason for it, and if, in their work, they respect the sense of the community. When the first schooner ever built, on the coast of Massachusetts, slid from her stocks and floated gracefully upon the water, the chance exclamation of an admiring by-stander, "Oh, how she *scoons!*" drew from her contriver and builder the answer, "A *scooner* let her be, then," and made a new English word. The community ratified his act, and accepted the word he proposed, because the new thing wanted a new name, and there was no one else so well entitled as he to name it; if, on the other hand, he had assumed to christen a man-of-war a *scooner*, no one but his nearest neighbours would ever have heard of the attempt. The discoverer of a new asteroid, again, is allowed to select its title, provided he choose the name of some classical goddess, as is the established precedent for such cases—although, even then, he is liable to have the motives of his choice somewhat sharply looked into. The English astronomer who sought, a few years since, with covert loyalty, to call his planetling

"Victoria," was compelled to retract the appellation and offer another. An acute and learned Italian physician, some time in the last century, discovered a new physical force, and some one called it *galvanism*, after his name. Many of us well remember how, not long ago, a French *savant* devised a novel and universally interesting application of certain chemical processes; and here, again, by some person to whose act the community gave its assent, the product was named for its inventor a *daguerreotype*: and *galvanism* and *daguerreotype*, with their derivatives, are now as genuine and well established parts of the English language as are *sun* and *moon*, or *father* and *mother*. If Galvani had denominated his new principle *abracadabra*, or if Daguerre had styled his sun-pictures *aldiborontiphoscophornios*, these names would, indeed, have been not less inherently suitable than the ones actually chosen, in the view of the great majority of those who have since learned to use the latter; for comparatively few have ever heard of the two eminent discoverers, or learned enough of Greek to be able to perceive the etymological aptness of *type*; yet those who are accustomed to direct public opinion upon such subjects would have revolted, and insisted upon the substitution of other titles, which should seem to them to possess an obvious reason and applicability. The public has looked on quietly, during the last half-century, while the geologists have been bringing into our English speech their flood of new words, nouns, adjectives, and verbs, of various origin and not seldom of uncouth and barbarous aspect, wherewith to signify the new knowledge added by them to the common stock that we all draw from: these gentlemen know best; if they agree among themselves that necessity and propriety require us to say *Silurian*, *palæontological*, *oölite*, *post-pleiocene*, and the like, we are ready to do so, whether our acquaintance with ancient and modern geography and with the classical tongues be or be not sufficient to enable us to discover or appreciate the reason of each term.

But even in respect to the more intimate and sacred part of language, the words and phrases of universal and every-day use, the community confers some measure of authority upon

those who have a just title to it, upon great masters in the art of speech, upon speakers whose eloquence carries captive all hearts, upon writers whose power in wielding the common instrument of thought is felt and acknowledged through all ranks. Such a one may now and then coin a new word, if he follow established analogies; he may revive and bring again into currency one which had fallen into desuetude; he may confer on an old word a new value, not too far differing from that already belonging to it—and the license shall be ratified by general acceptance. A great author may, by his single authority, turn the trembling scale in favour of the admission to good usage of some popular word or phrase, born of an original corruption or blunder, which had hitherto been frowned upon and banned; nay, even his mannerisms and conceits may perhaps become the law of the language. The maxim *usus norma loquendi*, 'usage is the rule of speech,' is of supreme and uncontrolled validity in every part and parcel of every human tongue, and each individual can make his fellows talk and write as he does just in proportion to the influence which they are disposed to concede to him.

In a language circumstanced like ours, a conscious and detailed discussion sometimes arises on the question of admitting some new word into its recognized vocabulary. We all remember the newspaper controversy, not long ago, as to whether we ought to call a message sent by telegraph a *telegraph* or a *telegram*; and many of us, doubtless, are yet waiting to see how the authorities settle it, that we may govern our own usage accordingly. We have a suffix *able*, which, like a few others that we possess, we use pretty freely in forming new words. Within no very long time past, some writers and speakers have added it to the verb *rely*, forming the adjective *reliable*. The same thing must have been done at nearly the same time to other verbs, awakening neither question nor objection; while, nevertheless, *reliable* is still shut out from the best—or, at least, from the most exclusive —society in English speech. And why? Because, in the first place, say the objectors, the word is unnecessary; we have already *trustworthy*, which means the same thing: fur-

ther, it is improperly and falsely formed; as we say "to rely *on*" anything, our derivative adjective, if we make one, should be *relionable*, not *reliable*: finally, it is low-caste; A, B, and C, those prime authorities in English style, are careful never to let it slip from their pens. The other side, however, are obstinate, and do not yield the point. The first objection, they retort, is insufficient; no one can properly oppose the enrichment of the language by a synonym, which may yet be made to distinguish a valuable shade of meaning—which, indeed, already shows signs of doing so, as we tend to say "a *trustworthy* witness," but "*reliable* testimony." The second is false: English etymology is by no means so precise in its application of the suffix *able* as the objectors claim; it admits *laughable*, meaning 'worthy to be laughed *at*,' *unaccountable*, 'not to be accounted *for*,' *indispensable*, 'not to be dispensed *with*,' as well as many other words of the same kind; and even *objectionable*, 'liable to objection,' *marriageable*, 'fit for marriage,' and so forth. As for the third objection, whatever A, B, and C may do, it is certain that D, F, and H, with most of the lower part of the alphabet (including nearly all the X's, Y's, and Z's, the unknown quantities), use the new form freely; and it is vain to stand out against the full acceptance of a word which is supported by so much and so respectable authority. How the dispute is likely, or ought, to terminate, need not concern us here; it is only referred to because, while itself carried on in full consciousness, and on paper, it is a typical illustration of a whole class of discussions which go on silently, and even more or less unconsciously, in the minds before which is presented, for acceptance or rejection, any proposed alteration in the subsisting usages of speech. Is it called for? is it accordant with the analogies of the language? is it offered or backed by good authority? these are the considerations by which general consent is won or repelled; and general consent decides every case without appeal.

Downright additions, however, to the vocabulary of a spoken tongue, even those who hold to the doctrine of the organic life of language will probably be willing to ascribe to human agency; since no man in his sober senses, it would

seem, could possibly maintain that, when some individual mind has formed a conception or drawn a deduction, or when some individual ingenuity has brought forth a product of any of the modes of activity of which man is capable, language itself spontaneously extrudes a word for its designation! He who sees is likewise he who says; the ingenuity that could find the thing was never at a loss to devise also its appellation.

But the case is not otherwise with those gradual changes which bring about the decay of grammatical structure, or the metamorphosis of phonetic form, in a language. Though they go on in a more covert and unacknowledged way than the augmentations of a vocabulary, they are due to the action of the same forces. If we write *knight*, and pronounce it *nit*, while our ancestors spelled the word *cniht*, and made its every letter distinctly audible (giving the *i* our short *i*-sound, as in *pin*)—just as the Germans even now both write and speak the same word *knecht*—we know that it is not because, by any force inherent in the word itself, the fuller form grew into the simpler, but because the combination *kn*, as initial, was somewhat difficult for men's organs to utter, and therefore began to lose its *k*, first, in the mouths of careless and easy speakers; and the corruption went on gaining in popularity, until it became the rule of our speech to silence the mute before the nasal in all such words (as in *knife*, *knit*, *gnat*, *gnaw*, etc.); because, moreover, the sound of the guttural *h* after a vowel became unpopular, men's organs shrinking from the effort of producing it, and was finally got rid of everywhere (being either left out entirely, as in *nigh*, *ought*, or turned into *f*, as in *laugh*, *cough*); while, at the same time, the loss of this consonant led to a prolongation of the vowel *i*, which was changed into the diphthongal sound we now give it; in company, too, with so many other of the "long *i*'s" of the older language, that our usual name at present for the diphthong is "long *i*." And so in all the multitude of similar cases. There is no necessity, physiological or other, for the rustic's saying *kău* for *cow*; only the former is a lazy drawling utterance, which opens the mouth less widely than the latter. A precisely

similar flattening of the simple sound of *a*, in such words as *grăsp, grăft, dănce*—which but a brief time since were universally pronounced *grâsp, grâft, dânce* (*â* as in *fur*), and are so still in certain localities—is now so common as to have become the accepted mode of utterance; but no one fails to recognize in it a corruption of the previous pronunciation, made current by example and imitation, prompted and recommended by that lazy habit of mouth which has occasioned the dimming of so many of our clear vowels. The pronunciation *eĭther* and *neĭther* seems at the present time to be spreading in our community, and threatening to crowd out of use the better-supported and more analogical * *ēither* and *nēither;* but it is only by the deliberate choice of persons who fancy that there is something nicer, more *recherché*, more "English," in the new sound, and by imitation of these on the part of others. Such phonetic changes, we are accustomed to say, are inevitable, and creep in of themselves; but that is only another way of saying that we know not who in particular is to blame for them. Offences must needs come, but there is always that man by whom they come, could we but trace him out.

It is unnecessary to dwell longer upon this point, or to illustrate it more fully, inasmuch as even those who teach the independent existence and organic growth of language yet allow that phonetic change is the work of men, endeavouring to make things easy to their organs of speech.

A language in the condition in which ours is at present, when thousands of eyes are jealously watching its integrity, and a thousand pens are ready to be drawn, and dyed deep in ink, to challenge and oppose the introduction into it of any corrupt form, of any new and uncalled-for element, can, of course, undergo only the slowest and the least essential alteration. It is when the common speech is in the sole keeping of the uncultivated and careless speakers, who care little for classical and time-honoured usages, to whom the preferences of the moment are of more account than any-

* The only English word in which *ei* has the "long *i*" sound is *height*, and even there it is nothing but an old orthographical blunder; there was no reason for divorcing the derivative noun in spelling from its theme, *high*.

thing in the past or in the future, that mutation has its full course. New dialects are wont to grow up among the common people, while the speech of the educated and lettered class continues to be what it has been. But the nature of the forces in action is the same in the one case as in the other: all change in language is the work of the will of its speakers, which acts under the government of motives, through the organs of speech, and varies their products to suit its necessities and its convenience. Every single item of alteration, of whatever kind, and of whatever degree of importance, goes back to some individual or individuals, who set it in circulation, from whose example it gained a wider and wider currency, until it finally won that general assent which is alone required in order to make anything in language proper and authoritative. Linguistic change must be gradual, and almost insensible while in progress, for the reason that the general assent can be but slowly gained, and can be gained for nothing which is too far removed from former usage, and which therefore seems far-fetched, arbitrary, or unintelligible. The collective influence of all the established analogies of a language is exerted against any daring innovation, as, on the other hand, it aids one which is obvious and naturally suggested. It was, for instance, no difficult matter for popular usage to introduce the new possessive *its* into English speech, nor to add *worked* to *wrought*, as preterit of *work*, nor to replace the ancient plural *kye* or *kine* (Anglo-Saxon *cy*, from *cu*, 'cow') by a modern one, *cows*, formed after the ordinary model: while to reverse either process, to crowd *its*, *worked*, and *cows* out of use by substitution of *his*, *wrought*, and *kine*, would have been found utterly impracticable. The power of resistance to change possessed by a great popular institution, which is bound up with the interests of the whole community, and is a part of every man's thoughts and habitual acts, is not easily to be overestimated. "How long has it taken to persuade and force the French people, for instance, into the adoption of the new decimal system of weights and measures! How have they been baffled and shamed who have thought, in these latter days, to amend in a few points, of

obvious desirability, our English orthography! But speech is a thing of far nearer and higher importance; it is the most precious of our possessions, the instrument of our thoughts, the organ of our social nature, the means of our culture; its use is not daily or hourly alone, but momently; it is the first thing we learn, the last we forget; it is the most intimate and clinging of our habits, and almost a second nature: and hence its exemption from all sweeping or arbitrary change. The community, to whom it belongs, will suffer no finger to be laid upon it without a reason; only such modifications as commend themselves to the general sense, as are virtually the carrying out of tendencies universally felt, have a chance of winning approval and acceptance, and so of being adopted into use, and made language.

Thus it is indeed true that the individual has no power to change language. But it is not true in any sense which excludes his agency, but only so far as that agency is confessed to be inoperative except as it is ratified by those about him. Speech and the changes of speech are the work of the community; but the community cannot act except through the initiative of its individual members, which it follows or rejects. The work of each individual is done unpremeditatedly, or as it were unconsciously; each is intent only on using the common possession for his own benefit, serving therewith his private ends; but each is thus at the same time an actor in the great work of perpetuating and of shaping the general speech. So each separate polyp on a coral-bank devotes himself simply to the securing of his own food, and excretes calcareous matter only in obedience to the exigencies of his individual life; but, as the joint result of the isolated labours of all, there slowly rises in the water the enormous coral cliff, a barrier for the waves to dash themselves against in vain. To pick out a single man, were he even an emperor, and hold him up to view in his impotence as proof that men cannot make or alter language, is precisely equivalent to selecting one polyp, though the biggest and brightest-coloured of his species, off the growing reef, and exclaiming over him, "See this weak and puny

creature! how is it possible that he and his like should build up a reef or an island?" No one ever set himself deliberately at work to invent or improve language—or did so, at least, with any valuable and abiding result; the work is all accomplished by a continual satisfaction of the need of the moment, by ever yielding to an impulse and grasping a possibility which the already acquired treasure of words and forms, and the habit of their use, suggest and put within reach. In this sense is language a growth; it is not consciously fabricated; it increases by a constant and implicit adaptation to the expanding necessities and capacities of men.

This, again, is what is meant by the phrases "organic growth, organic development," as applied to language. A language, like an organic body, is no mere aggregate of similar particles; it is a complex of related and mutually helpful parts. As such a body increases by the accretion of matter having a structure homogeneous with its own, as its already existing organs form the new addition, and form it for a determinate purpose—to aid the general life, to help the performance of the natural functions, of the organized being—so is it also with language: its new stores are formed from, or assimilated to, its previous substance; it enriches itself with the evolutions of its own internal processes, and in order more fully to secure the end of its being, the expression of the thought of those to whom it belongs. Its rise, development, decline, and extinction are like the birth, increase, decay, and death of a living creature.

There is a yet closer parallelism between the life of language and that of the animal kingdom in general. The speech of each person is, as it were, an individual of a species, with its general inherited conformity to the specific type, but also with its individual peculiarities, its tendency to variation and the formation of a new species. The dialects, languages, groups, families, stocks, set up by the linguistic student, correspond with the varieties, species, genera, and so on, of the zoölogist. And the questions which the students of nature are so excitedly discussing at the present day—the nature of specific distinctions, the derivation of species by

individual variation and natural selection, the unity of origin of animal life—all are closely akin with those which the linguistic student has constant occasion to treat. We need not here dwell further upon the comparison: it is so naturally suggested, and so fruitful of interesting and instructive analogies, that it has been repeatedly drawn out and employed, by students both of nature and of language.*

Once more, a noteworthy and often-remarked similarity exists between the facts and methods of geology and those of linguistic study. The science of language is, as it were, the geology of the most modern period, the Age of Man, having for its task to construct the history of development of the earth and its inhabitants from the time when the proper geological record remains silent; when man, no longer a mere animal, begins by the aid of language to bear witness respecting his own progress and that of the world about him. The remains of ancient speech are like strata deposited in bygone ages, telling of the forms of life then existing, and of the circumstances which determined or affected them; while words are as rolled pebbles, relics of yet more ancient formations, or as fossils, whose grade indicates the progress of organic life, and whose resemblances and relations show the correspondence or sequence of the different strata; while, everywhere, extensive denudation has marred the completeness of the record, and rendered impossible a detailed exhibition of the whole course of development.

Other analogies, hardly less striking than these, might doubtless be found by a mind curious of such things. Yet they would be, like these, analogies merely, instructive as illustrations, but becoming fruitful of error when, letting our fancy run away with our reason, we allow them to determine our fundamental views respecting the nature of language and the method of its study; when we call language a living

* For instance, by Lyell (Antiquity of Man, chapter xxiii.), who has founded upon it a lucid and able analogical argument bearing on the Darwinian theory of the mutation of species. Professor August Schleicher (Die Darwinsche Theorie und die Sprachwissenschaft, Weimar, 1863) attempts absolutely to prove by its aid the truth of the Darwinian theory, overlooking the fact that the relation between the two classes of phenomena is one of analogy only, not of essential agreement.

and growing organism, or pronounce linguistics a physical science, because zoölogy and geology are such. The point is one of essential consequence in linguistic philosophy. We shall never gain a clear apprehension of the phenomena of linguistic history, either in their individuality or in their totality, if we mistake the nature of the forces which are active in producing them. Language is, in fact, an institution—the word may seem an awkward one, but we can find none better or more truly descriptive—the work of those whose wants it subserves; it is in their sole keeping and control; it has been by them adapted to their circumstances and wants, and is still everywhere undergoing at their hands such adaptation; every separate item of which it is composed is, in its present form—for we are not yet ready for a discussion of the ultimate origin of human speech—the product of a series of changes, effected by the will and consent of men, working themselves out under historical conditions, and conditions of man's nature, and by the impulse of motives, which are, in the main, distinctly traceable, and form a legitimate subject of scientific investigation.

These considerations determine the character of the study of language as a historical or moral science. It is a branch of the history of the human race and of human institutions. It calls for aid upon various other sciences, both moral and physical: upon mental and metaphysical philosophy, for an account of the associations which underlie the developments of signification, and of the laws of thought, the universal principles of relation, which fix the outlines of grammar; upon physiology, for explanation of the structure and mode of operation of the organs of speech, and the physical relations of articulate sounds, which determine the laws of euphony, and prescribe the methods of phonetic change; upon physical geography and meteorology, even, for information respecting material conditions and climatic aspects, which have exerted their influence upon linguistic growth. But the human mind, seeking and choosing expression for human thought, stands as middle term between all determining causes and their results in the development of language. It is only as they affect man himself, in his desires and tend-

encies or in his capacities, that they can affect speech: the immediate agent is the will of men, working under the joint direction of impelling wants, governing circumstances, and established habits. What makes a physical science is that it deals with material substances, acted on by material forces. In the formation of geological strata, the ultimate cognizable agencies are the laws of matter; the substance affected is tangible matter; the product is inert, insensible matter. In zoölogy, again, as in anatomy and physiology, the investigator has to do with material structures, whose formation is dependent on laws implanted in matter itself, and beyond the reach of voluntary action. In language, on the other hand, the ultimate agencies are intelligent beings, the material is—not articulated sound alone, which might, in a certain sense, be regarded as a physical product, but—sound made significant of thought; and the product is of the same kind, a system of sounds with intelligible content, expressive of the slowly accumulated wealth of the human race in wisdom, experience, comprehension of itself and of the rest of creation. What but an analogical resemblance can there possibly be between the studies of things so essentially dissimilar?

There is a school of modern philosophers who are trying to materialize all science, to eliminate the distinction between the physical and the intellectual and moral, to declare for naught the free action of the human will, and to resolve the whole story of the fates of mankind into a series of purely material effects, produced by assignable physical causes, and explainable in the past, or determinable for the future, by an intimate knowledge of those causes, by a recognition of the action of compulsory motives upon the passively obedient nature of man. With such, language will naturally pass, along with the rest, for a physical product, and its study for a physical science; and, however we may dissent from their general classification, we cannot quarrel with its application in this particular instance. But by those who still hold to the grand distinction of moral and physical sciences, who think the action of intelligent beings, weighing motives and selecting courses of conduct, seeing ends and seeking means

to their attainment, to be fundamentally and essentially different from that of atoms moved by gravity, chemical affinity, and the other immutable forces of nature, as we call them—by such, the study of language, whose dependence upon voluntary action is so absolute that not one word ever was or ever will be uttered without the distinct exertion of the human will, cannot but be regarded as a moral science; its real relationship is with those branches of human knowledge among which common opinion is accustomed to rank it—with mental philosophy, with philology, with history.

While, however, we are thus forced to the acknowledgment that everything in human speech is a product of the conscious action of human beings, we should be leaving out of sight a matter of essential consequence in linguistic investigation if we failed to notice that what the linguistic student seeks in language is not what men have voluntarily or intentionally placed there. As we have already seen, each separate item in the production or modification of language is a satisfaction of the need of the moment; it is prompted by the exigencies of the particular case; it is brought forth for the practical end of convenient communication, and with no ulterior aim or object whatsoever; it is accepted by the community only because it supplies a perceived want, and answers an acknowledged purpose in the uses of social intercourse. The language-makers are quite heedless of its position and value as part of a system, or as a record with historical content, nor do they analyze and set before their consciousness the mental tendencies which it gratifies. A language is, in very truth, a grand system, of a highly complicated and symmetrical structure; it is fitly comparable with an organized body; but this is not because any human mind has planned such a structure and skilfully worked it out. Each single part is conscious and intentional; the whole is instinctive and natural. The unity and symmetry of the system is the unconscious product of the efforts of the human mind, grappling with the facts of the world without and the world within itself, and recording each separate result in speech. Herein is a real language fundamentally different from the elaborate and philosophical structures

with which ingenious men have sometimes thought to replace them.* These are indeed artful devices, in which the character and bearing of each part is painfully weighed and determined in advance: compared with them, language is a real growth; and human thought will as readily exchange its natural covering for one of them as the growing crustacean will give up its shell for a casing of silver, wrought by the most skilful hands. Their symmetry is that of a mathematical figure, carefully laid out, and drawn to rule and line; in language, the human mind, tethered by its limited capacities in the midst of creation, reaches out as far as it can in every direction and makes its mark, and is surprised at the end to find the result a circle.

In whatever aspect the general facts of language are viewed, they exhibit the same absence of reflection and intention. Phonetic change is the spontaneous working out of tendencies which the individual does not acknowledge to himself, in their effects upon organs of whose structure and workings he is almost or wholly ignorant. Outward circumstances, historical conditions, progress of knowledge and culture, are recorded in speech because its practical uses require that they should be so, not because any one has attempted to depict them. Language shows ethnic descent, not as men have chosen to preserve such evidence of their kindred with other communities and races, but as it cannot be effaced without special effort directed to that end. The operations of the mind, the development of association, the laws of subjective relation, are exhibited there, but only as they are the agencies which govern the phenomena of speech, unrecognized in their working, but inferrible from their effects.

Now it is this absence of reflection and conscious intent which takes away from the facts of language the subjective character that would otherwise belong to them as products of voluntary action. The linguistic student feels that he is not dealing with the artful creations of individuals. So far

* For an account of some of these attempts at an artificial language, of theoretically perfect structure, and designed for universal use, see Professor Max Müller's Lectures on Language, second series, second lecture.

as concerns the purposes for which he examines them, and the results he would derive from them, they are almost as little the work of man as is the form of his skull, the outlines of his face, the construction of his arm and hand. They are fairly to be regarded as reflections of the facts of human nature and human history, in a mirror imperfect, indeed, but faithful and wholly trustworthy; not as pictures drawn by men's hands for our information. Hence the close analogies which may be drawn between the study of language and some of the physical sciences. Hence, above all, the fundamental and pervading correspondence between its whole method and theirs. Not less than they, it founds itself upon the widest observation and examination of particular facts, and proceeds toward its results by strict induction, comparing, arranging, and classifying, tracing out relations, exhibiting an inherent system, deducing laws of general or universal application, discovering beneath all the variety and diversity of particulars an ever-present unity, in origin and development, in plan and purpose. Beyond all question, it is this coincidence of method which has confused some of the votaries of linguistic science, and blinded their eyes to the true nature of the ultimate facts upon which their study is founded, leading them to deny the agency of man in the production and change of language, and to pronounce it an organic growth, governed by organic forces.

Another motive—a less important one, and in great part, doubtless, unconscious in its action — impelling certain students of language to claim for their favourite branch of investigation a place in the sisterhood of physical sciences, has been, as I cannot but think, an apprehension lest otherwise they should be unable to prove it entitled to the rank of a science at all. There is a growing disposition on the part of the devotees of physical studies—a class greatly and rapidly increasing in importance and influence—to restrict the honourable title of science to those departments of knowledge which are founded on the unvarying laws of material nature, and to deny the possibility of scientific method and scientific results where the main element of

action is the varying and capricious will of man. The considerations adduced above, it is hoped, will remove this apprehension. Nor was it ever otherwise than needless, as the tendency which called it forth is mistaken and unjustifiable. The name "science" admits no such limitation. The vastness of a field of study, the unity in variety of the facts it includes, their connection by such ties that they allow of strict classification and offer fruitful ground for deduction, and the value of the results attained, the truth deduced—these things make a science. And, in all these respects, the study of language need fear a comparison with no one of the physical sciences. Its field is the speech of all mankind, cultivated or savage; the thousands of existing dialects, with all their recorded predecessors; the countless multitudes of details furnished by these, each significant of a fact in human history, external or internal. The wealth of languages is like the wealth of species in the whole animal kingdom. Their tie of connection is the unity of human nature in its wants and capacities, the unity of human knowledge, of existing things and their relations, to be apprehended by the mind and reflected in speech—a bond as infinite in its ramifications among all the varieties of human language, and as powerful in its binding force, as is the unity of plan in vegetable or animal life. The results, finally, for human history, the history of mind, of civilization, of connection of races, for the comprehension of man, in his high endowments and in his use of them, are of surpassing interest. To compare their worth with that of the results derivable from other sciences were to no good purpose: all truth is valuable, and that which pertains to the nature and history of man himself is, to say the least, not inferior in interest to that which concerns his surroundings. Linguistic science, then, has in itself enough of dignity and true scientific character not to need to borrow aught of either from association with other branches of inquiry, which differ from it in subject and scope, while yet they seek by corresponding methods the same ultimate object, the increase of knowledge, and the advancement of man in comprehension of himself and of the universe.

We return, now, from this necessary digression, to follow onward our leading inquiry, "Why we speak as we do?" And we have to push the question a step further than in the last lecture, asking this time, not simply how we ourselves came into possession of the signs of which our mother-tongue is made up, but also how those from whom we learned them came into possession of them before us; how the tradition from whose hands we implicitly accepted them got them in the form in which it passed them on to us; why our words, in short, are what they are, and not otherwise. We have seen that every part and particle of every existing language is a historical product, the final result of a series of changes, working themselves out in time, under the pressure of circumstances, and by the guidance of motives, which are not beyond the reach of our discovery. This fact prescribes the mode in which language is to be fruitfully studied. If we would understand anything which has *become* what it is, a knowledge of its present constitution is not enough: we must follow it backward from stage to stage, tracing out the phases it has assumed, and the causes which have determined the transition of one into the other. Merely to classify, arrange, and set forth in order the phenomena of a spoken tongue, its significant material, usages and modes of expression, is grammar and lexicography, not linguistic science. The former state and prescribe only; the latter seeks to explain. And when the explanation is historical, the search for it must be of the same character. To construct, then, by historical processes, with the aid of all the historical evidences within his reach, the history of development of language, back to its very beginning, is the main task of the linguistic student; it is the means by which he arrives at a true comprehension of language, in its own nature and in its relations to the human mind and to human history.

Furthermore, it is hardly necessary to point out that the history of language reposes on that of words. Language is made up of signs for thought, which, though in one sense parts of a whole, are in another and more essential sense isolated and independent entities. Each is produced for its

own purpose; each is separately exposed to the changes and vicissitudes of linguistic life, is modified, recombined, or dropped, according to its own uses and capacities. Hence etymology, the historical study of individual words, is the foundation and substructure of all investigation of language; the broad principles, the wide-reaching views, the truths of universal application and importance, which constitute the upper fabric of linguistic science, all rest upon word-genealogies. Words are the single witnesses from whom etymology draws out the testimony which they have to give respecting themselves, the tongue to which they belong, and all human speech.

How the study of words is made the means of bringing to light the processes of linguistic growth, and what those processes are, it will, accordingly, be our next duty to examine and set forth by suitable examples. Having only illustration in view, we will avoid all cases of a difficult or doubtful character, noticing only words whose history is well known; choosing, moreover, those which, while they truly exhibit the principles we seek to establish, are at the same time of the simplest kind, and most open to general comprehension.

There is no word or class of words whose history does not exemplify, more or less fully, all the different kinds of linguistic change. It will be more convenient for us, however, to take up these kinds in succession, and to select our instances accordingly. And, as the possibility of etymological analysis depends in no small part on the nature of words as not simple entities, but made up of separate elements, this composite character of the constituents of speech may properly engage our first attention.

That we are in the constant habit of putting together two independent vocables to form a compound word, is an obvious and familiar fact. Instances of such words are *fear-inspiring*, *god-like*, *break-neck*, *house-top*. They are substitutes for the equivalent phrases *inspiring fear*, *like a god*, *apt to break one's neck*, *top of a house*. For the sake of more compact and convenient expression, we have given a closer unity to the compound word than belongs to the aggregate

which it represents, by omission of connectives, by inversion of the more usual order of arrangement, but most of all by unity of accent: this last is the chief outward means of composition; it converts two entities into one, for the nonce, by subordinating the one of them to the other. Our common talk is strewn with such words, and so gradual is the transition to them from the mere collocations of the phrase, that there are couples, like *mother-tongue*, *well-known*, which we hardly know whether to write separately, as collocations only, or with a hyphen, as loose compounds; others, like *dial-plate*, *well-being*, usage so far recognizes for compounds that they are always written together, sometimes with the hyphen and sometimes without; others yet, like *godlike*, *herself*, are so grown together by long contact, by habitual connection, that we hardly think of them as having a dual nature. And even more than this: we have formed some so close combinations that it costs us a little reflection to separate them into their original parts. Of such a character is *forehead*, still written to accord with its derivation, as a name for the *fore* part of the *head*, but so altered in pronunciation that, but for its spelling, its origin would certainly escape the notice of nineteen-twentieths of those who use it. Such, again, is *fortnight*, altered both in pronunciation and in spelling from the *fourteen nights* out of which it grew. Such, once more, is our familiar verb *breakfast*. We gave this name to our morning meal, because it *broke*, or interrupted, the longest *fast* of the day, that which includes the night's sleep. We said at first *breāk fâst*—"*I* broke fast at such an hour this morning:" he, or they, who first ventured to say *I breakfasted* were guilty of as heinous a violation of grammatical rule as he would be who should now declare *I takedinnered*, instead of *I took dinner;* but good usage came over to their side and ratified their blunder, because the community were minded to give a specific name to their earliest meal and to the act of partaking of it, and therefore converted the collocation *breākfâst* into the real compound *brĕakfast*.

Yet once more, not only are those words in our language of composite structure, of which at first sight, or on second

thought, we thus recognize the constituent elements; not a few, also, which we should not readily conjecture to be other than simple and indivisible entities, and which could not be proved otherwise by any evidence which our present speech contains, do nevertheless, when we trace their history by the aid of other and older languages than ours, admit of analysis into component parts. We will note, as instances, only a familiar word or two, namely *such* and *which*. The forms of these words in Anglo-Saxon are *swylc* and *hwylc*: with the latter of them the Scottish *whilk* for *which* quite closely agrees, and they also find their near correspondents in the German *solch* and *welch*. On following up their genealogy, from language to language of our family, we find at last that they are made up of the ancient words for *so* and *who*, with the adjective *like* added to each: *such* is *so-like*, 'of that likeness or sort;' *which* is *who-like*, 'of what likeness or sort.'

But we turn from compounds like these, in which two originally independent words are fully fused into one, in meaning and form, to another class, of much higher importance in the history of language.

Let us look, first, at our word *fearful*. This, upon reflection, is a not less evident compound than *fear-inspiring*: our common adjective *full* is perfectly recognizable as its final member. Yet, though such be its palpable origin, it is, after all, a compound of a somewhat different character from the other. The subordinate element *full*, owing to its use in a similar way in a great number of other compounds, such as *careful*, *truthful*, *plentiful*, *dutiful*, and the frequent and familiar occurrence of the words it forms, has, to our apprehension, in some measure lost the consciousness of its independent character, and sunk to the condition of a mere suffix, forming adjectives from nouns, like the suffix *ous* in such words as *perilous*, *riotous*, *plenteous*, *duteous*. It approaches, too, the character of a suffix, in that its compounds are not, like *fear-inspiring* and *house-top*, directly translatable back into the elements which form them: *plentiful* and *dutiful* do not mean 'full of plenty' and 'full of duty,' but are the precise equivalents of *plenteous* and *duteous*. We could with entire propriety form an adjective from a new noun by

adding *ful* to it, without concerning ourselves as to whether the corresponding phrase, "full of so and so," would or would not make good sense. And when we hear a Scotchman say *fearfu'*, *carefu'*, we both understand him without difficulty and do not think of inquiring whether he also clips the adjective *full* to *fu'*.

The word of opposite meaning, *fearless*, is not less readily recognizable as a compound, and our first impulse is to see in its final element our common word *less*, to interpret *fearless* as meaning '*minus* fear,' 'deprived of fear,' and so 'exempt from fear.' A little study of the history of such words, however, as it is to be read in other dialects, shows us that this is a mistake, and that our *less* has nothing whatever to do with the compound. The Anglo-Saxon form of the ending, *leas*, is palpably the adjective *leas*, which is the same with our word *loose*; and *fearless* is primarily 'loose from fear,' 'free from fear.' The original subordinate member of the compound has here gone completely through the process of conversion into a suffix, being so divorced from the words which are really akin with it that its derivation is greatly obscured, and a false etymology is suggested to the mind which reflects upon it.

Take, again, such words as *godly*, *homely*, *brotherly*, *lovely*. Here, as in the other cases, each is composed of two parts; but, while we recognize the one as a noun, having an independent existence in the language, we do not even feel tempted to regard the other as anything but an adjective suffix, destitute of separate significance; it appears in our usage only as an appendage to other words, impressing upon them a certain modification of meaning. What, however, is its history? Upon tracing it up into the older form of our speech, the Anglo-Saxon, we find that our modern usage has mutilated it after the same fashion as the Scottish dialect now mutilates the *ful* of *fearful*—by dropping off, namely, an original final consonant: its earlier form was *lic*. The final guttural letter we find preserved even to the present day in the corresponding suffixes of the other Germanic languages, as in the German *lich*, Swedish *lig*, Dutch *lijk*. These facts lead us naturally to the conjecture that the so-

called suffix may be nothing more than a metamorphosis of our common adjective *like;* and a reference to the oldest Germanic dialect, the Mœso-Gothic, puts the case beyond all question; for there we find the suffix and the independent adjective to be in all respects the same, and the derivatives formed with the suffix to be as evident compounds with the adjective as, are our own *godlike, childlike,* and so on. Words thus composed are common in all the Germanic tongues; but we who speak English have given the same suffix a further modification of meaning, and an extension of application, which belong to it nowhere else. In our usage it is an adverbial suffix, by which any adjective whatever may be converted into an adverb, as in *truly, badly, fearfully, fearlessly.* In the old Anglo-Saxon, such adverbs were oblique cases of adjectives in *lic,* and so, of course, were derived only from adjectives formed by this ending; the full adverbial suffix was *lice,* the *e* being a case-termination: instances are *ânlîce,* 'only, singularly,' from *ânlic,* 'sole, singular,' literally 'one-like;' *leôflice,* 'lovelily,' from *leôflic,* 'lovely.' We moderns, now, have suffered the ending to go out of use as one forming adjectives, only retaining the adjectives so formed which we have inherited from the ancient time; but we have taken it up in its adverbial application, and, ignoring both its original character and its former limitation to a single class of adjectives, apply it with unrestricted freedom in making an adverb from any adjective we choose; while, at the same time, we have mutilated its form, casting off as unnecessary the vowel ending, along with the consonant to which it was appended. The history of this adverbial suffix is worthy of special notice, inasmuch as the suffix itself is the latest addition which our grammatical system has gained in the synthetic way, and as its elaboration has taken place during the period when the growth of our language is illustrated by contemporary documents. The successive steps were clearly as follows: the adjective *like* was first added to a number of nouns, forming a considerable class of adjective compounds, like those now formed by us with *full;* then, like the latter word, it lost in a measure the consciousness of its origin, and was

regarded rather as a suffix, forming derivative adjectives; one of the oblique cases of these adjectives was next often employed in an adverbial sense; and the use of the suffix in its extended form and with its modified application grew in importance and frequency, until finally it threw quite into the shade and supplanted the adjective use—and the independent adjective had become a mere adverbial ending. The mutilation of its form went hand in hand with this obliviousness of its origin and with its transferral to a new office; each helped on the other.

Another Germanic suffix, *ship*, as in *friendship*, *worship*, *lordship*, is distinctly traceable to its origin in the independent word *shape*; and its transition of meaning, from 'form' to 'aspect, condition, *status*, rank,' though perhaps less obvious than those which we have already noted, is evidently a natural and easy one.

A case of somewhat greater difficulty is presented us in such forms as *I loved*. Here the final *d* is, as we say, the sign of the preterit tense, added to the root *love* in order to adapt it to the expression of past time; and, from the evidence presented in our own language, no suspicion of its derivation from an independent word would ever cross our minds. Nor does the Anglo-Saxon, nor any other of the Germanic dialects of the same period, cast any light upon its origin. Since, however, such a sign of past time is one of the distinctive features of the Germanic group of languages, and is found nowhere else in the greater family to which these belong, we cannot help assuming that it has grown up in them since their separation from the rest of the family: just as the adverbial suffix *ly*, which is peculiar to our own tongue, has grown up in it since its separation from the other Germanic tongues. It is therefore a form of comparatively modern introduction, and we might hope to trace out its genesis. This is, in fact, disclosed to us by the Mœso-Gothic, the most ancient Germanic dialect, which stands toward the rest in somewhat the same relation as the Anglo-Saxon to the English; in its primitive and uncorrupted forms we see clearly that the preterits in question are made by appending to the root of the verb the past

tense of another verb, namely *did*, from *to do*. *We tamed* is in Mœso-Gothic *tamidêdum*, which means not less evidently *tame-did-we* than the Anglo-Saxon *sóthlîce*, 'soothly, truly,' means 'in a sooth-like (truth-like) way.' *I loved* is, then, originally *I love did*, that is, *I did love*—as, unconsciously repeating in another way the same old act of composition, we now almost as often say. The history of the suffix has been quite like that of the *ly* of *truly*, save that it happened longer ago, and is therefore more difficult to read.

All our illustrations hitherto have been taken from the Germanic part of our language, and they have all been forms which are peculiar to the Germanic dialects, and which we have therefore, as already remarked, every reason to believe of later date than the separation of that group of dialects from the other tongues with which it stands related. Yet, with the exception of the adverbial application of the suffix *ly*, they are all anterior to the time at which we first make acquaintance with any Germanic tongue in contemporary records. Our confidence in the reality of our etymological analysis, and in the justness of the inferences drawn from it, is not on that account any the less: we feel as sure that the words in question were made by putting together the two parts into which each is still resolvable as if the whole process of composition had gone on under our own observation. If this were not so, if our conclusions respecting the growth of language were to be limited by the possession of strict documentary evidence, our researches in linguistic history would be stopped almost at the outset. Few languages have any considerable portion of their development illustrated by contemporary records; literature is wont, at the best, to cast light upon certain distinct epochs in the history of a dialect, leaving in obscurity the intervening periods; nor do we ever, by such help, reach a point at all nearly approaching that of the actual origin of speech. Hence the necessity resting upon the etymologist of interrogating the material of language itself, of making words yield up, on examination, their own history. He applies the analogy of processes of change and development which are actually going on in language to explain the earlier results of the

same or like processes. And, if he work with due caution and logical strictness, his results are no more exposed to question than are those of the geologist, who infers, from the remains of animal and vegetable organisms in deeply-buried rocks, the deposition of those rocks in a period when animal and vegetable life, analogous with that of our own day, was abundant.

If, now, we turn our attention to other portions of our English speech, to those which come to us from the Latin, or which are of an ancient and primitive growth, we note the same condition of things as prevailing there also. The subject admits of the most abundant and varied illustration, but we must limit ourselves to but an instance or two.

In the series of multiplicative numerals, *double*, *triple*, *quadruple*, *quintuple*, and so on, we have a suffix *ple*, which is the principal indicator of the grammatical quality of the words. On following them up into the Latin, whence we derive them, we find this brief ending to be a mutilated remnant of the syllable *plic*, which is a well-known root, meaning 'to bend, to fold.' *Double* is thus by origin *duplic*, by abbreviation from *duo-plic*, and is, in sense, the precise Latin equivalent of our Germanic word *two-fold*. We still retain the fuller form in *duplicate*, the learned synonym of *double*.

Again, one of the oldest words in our familiar speech is *am*, the first person of the verb *to be*, nor do we see in it any signs of being otherwise than simple and indivisible. As, however, we trace its history of changes backward, from one to another of the languages with which our own claims kindred, we are enabled to discover that its two sounds are the scanty relics of two separate elements: the first, *a*, is all that remains of an original syllable *as*, which expressed the idea of existence; the other, *m*, represents an ending, *mi*, which, originally a pronoun, and having the same meaning as the same word, *me*, still has with us, was employed to limit the predicate of existence to the person speaking: it was, in fact, the suffix universally employed, during the earliest period in the history of our family of languages, to form the first persons singular of verbs. *Am*, then, really contains a

verb and its subject pronoun, and means 'be-I;' that is, 'I exist.' The third person of the same verb, *is*, possesses virtually a similar character, although linguistic usage, in its caprice, has dealt somewhat differently with it. As *am* stands for *as-mi*, 'be-I,' so *is* stands for *as-ti*, 'be-that:' we have, indeed, worn off the second element altogether, so that our *is* is the actual representative only of the radical syllable *as;* but by far the greater number of the Germanic dialects, and of the other descendants from the primitive tongue in which was first formed the compound *asti*, have retained at least the initial consonant of the pronominal suffix: witness the German *ist*, the Slavonian *yest*, the Latin *est*, the Greek and Lithuanian *esti*, the Sanscrit *asti*, and so on. It is the same *t* which, in the form of *th* or *s*, still does service in the regular scheme of conjugation of our verbs, as ending of the third person singular present: thus, he *loveth* or *loves*.

The examples already given may sufficiently answer our purpose as illustrations of the way in which suffixes are produced, and grammatical classes or categories of words created. The adjectives in *ful*, or the adjectives in *less*, form together a related group, having a common character, as derivatives from nouns, and derivatives possessing a kindred significance, standing in a certain like relation to their primitives, filling a certain common office in speech, an office of which the sign is the syllable *ful*, or *less*, their final member or suffix. With *ly*, this is still more notably the case: the suffix *ly* is the usual sign of adverbial meaning; it makes much the largest share of all the adverbs we have. A final *m*, added to a verbal root, in an early stage of the history of our mother-tongue, and yet more anciently an added syllable *mi*, made in like manner the first persons singular present of verbs; as an added *s*, standing for an original syllable *ti*, does even to the present day make our third persons singular. All these grammatical signs were once independent elements, words of distinct meaning, appended to other words and compounded with them—appended, not in one or two isolated cases only, but so often, and in a sense so generally applicable, that they formed whole classes of compounds. There

was nothing about them save this extensibility of their application and frequency of their use to distinguish their compounds from such as *house-top, break-neck, forehead, fortnight*, and the others of the same class to which we have already referred. Yet this was quite enough to bring about a change of their recognized character, from that of distinct words to that of non-significant appendages to other words. Each passed over into the condition of a *formative element;* that is to say, an element showing the logical form, the grammatical character, of a derivative, as distinguished from its primitive, the word to which the sign was appended. There was a time when *fear-full, fear-loose, fear-free, free-making, fear-struck, love-like, love-rich, love-sick, love-lorn*, were all words of the same kind, mere lax combinations; it was only their different degree of availability for answering the ends of speech, for supplying the perceived needs of expression, that caused two or three of them to assume a different character, while the rest remained as they had been.

Often, as every one knows, there is an accumulation of formative elements in the same word. In *truthfully*, for example, we have the adverbial suffix *ly* added to the primitive *truthful;* in which, again, the adjective suffix *ful* has performed the same office toward the remoter primitive *truth*. By the use of a formative element of another kind, a prefix, we might have made the yet more intricate compound *untruthfully*. Nay, further, *truth* itself contains a suffix, and is a derivative from the adjective *true*, as appears from its analogy with *wealth* from *well, width* from *wide, strength* from *strong*, and many other like words; and even *true*, did we trace its history to the beginning, we should find ending in a formative element, and deriving its origin from a verbal root meaning 'to be firm, strong, reliable.' The Latin part of our language, which includes most of our many-syllabled words, offers abundant instances of a similar complicated structure. Thus, the term *inapplicabilities* contains two prefixes, the negative *in* and the preposition *ad* which means 'to,' and three suffixes, *able*, forming adjectives, *ty*, forming abstract nouns from adjectives, and *s*, the plural ending, all clustered about the verbal root *plic*, which we have already

seen itself forming a suffix, in *double*, *triple*, and so forth, and which conveys the idea of 'bending' or 'folding.' By successive extensions and modifications of meaning, by transferral from one category to another through means of their appropriate signs, we have developed this simple idea into a form which can only be represented by the long paraphrase 'numerous conditions of being not able to bend (or fit) to something.'

With but few exceptions—which, moreover, are only apparent ones—all the words of our language admit of such analysis as this, which discovers in them at least two elements, whereof the one conveys the central or fundamental idea, and the other indicates a restriction, application, or relation of that idea. Even those brief vocables which appear to us of simplest character can be proved either to exhibit still, like *am* for *as-mi*, the relic of a mutilated formative element, or, like *is* for *as-ti*, to have lost one which they formerly possessed. This, then, in our language (as in the whole family of languages to which ours is related), is the normal constitution of a word: it invariably contains a radical and a formal portion; it is made up of a root combined with a suffix, or with a suffix and prefix, or with more than one of each. In more technical phrase, no word is *unformed;* no one has been a mere significant entity, without designation of its relation, without a sign putting it in some class or category.

It is plain, therefore, that a chief portion of linguistic analysis must consist, not in the mere dismembering of such words as we usually style compounded, but in the distinction from one another of radical and formal elements; in the isolation of the central nucleus, or root, from the affixes which have become attached to it, and the separate recognition of each affix, in its individual form and office. But our illustrations have, as I think, made it not less plain that there is no essential and ultimate difference in the two cases: in the one, as in the other, our process of analysis is the retracing of a previous synthesis, whereby two independent elements were combined and integrated. That this is so to a certain extent is a truth so palpable as to admit of neither

denial nor doubt. Had there been in the Germanic languages no such adjective as *full*, no such derivative adjectives as *fearful* and *truthful* would have grown up in them; if they had possessed no adjective *like*, they would never have gained such adjectives as *godly* and *lovely*, nor such adverbs as *fearfully* and *truly*. So also with *friendship*, with *loved*, with *am* and *is*, and the rest. No inconsiderable number of the formative elements of our tongue, in every department of grammar and of word-formation, can be thus traced back to independent words, with which they were at first identical, out of which they have grown. It is true, at the same time, that a still larger number do not allow their origin to be discovered. But we have not, on that account, the right to conclude that their history is not of the same character. In grammar, as everywhere else, like effects presuppose like causes. We have seen how the formative elements are liable to become corrupted and altered, so that the signs of their origin are obscured, and may even be obliterated. The *full* in *truthful* is easy enough to recognize, but a little historical research is necessary in order to show us the *like* which is contained in *truly*. *Hateful* is, for aught we know, as old a compound as *lovely*, but linguistic usage has chanced to be more merciful to the evidence of descent in the former case than in the latter. A yet more penetrating investigation is required ere we discover our pronoun *me* in the word *am*, or our imperfect *did* in *I loved;* and, but for the happy chance that preserved to us the one or two fragmentary manuscripts in which are contained our only records of Mœso-Gothic speech, the genesis of the latter form would always have remained an unsolved problem, a subject for ingenious conjecture, but beyond the reach of demonstration. The loss of each intermediate stage, coming between any given dialect and its remotest ancestor, wipes out a portion of the evidence which would explain the origin of its forms. If English stood all alone among the other languages of the earth, but an insignificant part of its word-history could be read; its kindred dialects, contemporary and older, help us to the discovery of a much larger portion; and the preservation of authentic records of every period of its life would,

as we cannot hesitate to believe, make clear the rest. There is no break in the chain of analogical reasoning which compels the linguistic student to the conviction that his analyses are everywhere real, and distinguish those elements by the actual combination of which words were originally made up. On this conviction rests, for him, the value of his analytical processes: if they are to be regarded as in part historical and real, in part only theoretical and illusory, his researches into the history of language are baffled; he is in pursuit of a phantom, and not of truth.

Wherever, then, our study of words brings us to the recognition of an element having a distinct meaning and office, employed in combination with other elements for the uses of expression, there we must recognize an originally independent entity. The parts of our words were once themselves words.

Some of the remoter consequences involved in this principle will engage our attention at a more advanced stage of our inquiries into the history of human speech: our present purpose only requires us to notice that, since all known words have been constructed by putting together previously existing items of speech, the combination of old materials into new forms, the making of compounds, with frequent accompanying reduction of one of their members to a merely formal significance, is a very prominent part of the mechanism of language, one of the most fundamental and important of the processes by which are carried on its perpetual growth and change, its organic development. What other processes are the concomitants and auxiliaries of this one, we shall go on to inquire in the next lecture.

LECTURE III.

Phonetic change; its ground, action on compound words, part in word-making, and destructive effects. Replacement of one mode of formal distinction by another. Extension of analogies. Abolition of valuable distinctions. Conversion of sounds into one another. Physical characters of alphabetic sounds; physical scheme of the English alphabet. Obsolescence and loss of words. Changes of meaning; their ground and methods. Variety of meanings of one word. Synonyms. Conversion of physical into spiritual meaning. Attenuation of meaning; production of form-words. Variety of derivatives from one root. Unreflectiveness of the process of making names and forms. Conceptions antedate their names. Reason of a name historical, and founded in convenience, not necessity. Insignificance of derivation in practical use of language.

It will be our present task to continue the examination and illustration of the processes of linguistic growth which we began at our last interview. We completed at that time our preliminary inquiries into the mode of preservation and transmission of language, and were guided by them to a recognition of the true nature of the force which alone is efficient in all the operations of linguistic life—the events, as we may more properly style them, of linguistic history. It was found to be the will of men: every word that exists, exists only as it is uttered or written by the voluntary effort of human organs; it is changed only by an action proceeding from individuals, and ratified by the general consent of speakers and writers. Language, then, is neither an organism nor a physical product; and its study is not a physical but a moral science, a branch of the history of the human race and of human institutions. The method of its investigation

is historical, an endeavour to trace backward—even to the beginning, if the recorded evidence permit—the processes by which our own speech, or human speech in general, has become what it is, and to discover the *rationale* of those processes, the influences under which they have been carried on, and the ends which they have been intended to subserve. We took up first, accordingly, the process of combination of old material in language into new forms, and exhibited its universal agency in the production of the present constituents of speech. Not only are words put together to form what to our sense are and still remain ordinary compounds, but such compounds are further fused into a deceitful likeness to simple vocables; or, what is of yet more frequent occurrence and more important bearing, one of their members sinks to a subordinate position, and becomes a suffix, without recognized separate signification. This, it was claimed, is the way in which all formative elements, all signs of grammatical categories, have originated; and as every word in our language either contains, or has contained and been deprived of, a formative element, or more than one, the process of composition is one whose range and importance in linguistic history cannot easily be over-estimated.

But the same examples on which we relied to show how, and how extensively, words are compounded together and forms produced, have shown us not less clearly that mutilation and loss of the elements employed by language, and of the compounds and forms into which they enter, are also constant accompaniments of linguistic growth. "All that is born must die" seems a law almost as inexorable in the domain of speech as in that of organic life. We have next to turn our attention to the principles underlying this department of linguistic change, and to some of the modes of its action and the effects which it produces.

And the first and most important principle which we have to notice, the one which lies at the bottom of nearly all phonetic change in language, is the tendency, already alluded to and briefly illustrated in our first lecture, to make the work of utterance easier to the speaker, to put a more facile in the stead of a more difficult sound or combination

of sounds, and to get rid altogether of what is unnecessary in the words we use. All articulate sounds are produced by effort, by expenditure of muscular energy, in the lungs, throat, and mouth. This effort, like every other which man makes, he has an instinctive disposition to seek relief from, to avoid: we may call it laziness, or we may call it economy; it is, in fact, either the one or the other, according to the circumstances of each separate case: it is laziness when it gives up more than it gains; economy, when it gains more than it abandons. Every item of language is subject to its influence, and it works itself out in greatly various ways; we will give our first consideration to the manner in which its action accompanies, aids, and modifies that of the process of composition of old material into new forms, as last set forth. For it is composition, the building up of words out of elements formerly independent, that opens a wide field to the operation of phonetic change, and at the same time gives it its highest importance as an agency in the production and modification of language. If all words were of simple structure and brief form, their alterations would be confined within comparatively narrow limits, and would be of inferior consequence as constituting one of the processes of linguistic growth. Our adjective *like*, for example, is but slightly altered in our usage from the form which it had in the Anglo-Saxon *(lîc)* and the Mœso-Gothic *(leik)*; while, in the compounds into which it has entered, it is mutilated even past recognition: in the adjectives and adverbs like *godly* and *truly*, it has been deprived of its final consonant; in *such* and *which* (A.-S. *swylc, hwylc;* M.-G. *swaleik, hwaleik*), it has saved only the final consonant, and that in a greatly modified shape. Our preterit *did* is, indeed, but a remnant of its older self, but in *love-d* it has reached a much lower stage of reduction.

The reason which makes phonetic change rifest in linguistic combinations is the same with that which creates the possibility of any phonetic change at all in language. It is inherent in the nature of a word, and its relation to the idea which it represents. A word, as we have already seen, is not the natural reflection of an idea, nor its description,

nor its definition; it is only its designation, an arbitrary and conventional sign with which we learn to associate it. Hence it has no internal force conservative of its identity, but is exposed to all the changes which external circumstances, the needs of practical use, the convenience and caprice of those who employ it, may suggest. When we have once formed a compound, and applied it to a given purpose, we are not at all solicitous to keep up the memory of its origin; we are, rather, ready to forget it. The word once coined, we accept it as an integral representative of the conception to which we attach it, and give our whole attention to that, not concerning ourselves about its derivation, or its etymological aptness. Practical convenience becomes the paramount consideration, to which every other is made to give way. Let us look at an example or two. There is a certain class of insects, the most brilliant and beautiful which the entomologist knows. Its most common species, both in the Old world and the New, are of a yellow colour; clouds of these yellow flutterers, at certain seasons, swarm upon the roads and fill the air. Because, now, butter is or ought to be yellow, our simple and unromantic ancestors called the insect in question the *butterfly*, as they called a certain familiar yellow flower the *buttercup*. In our usage, this word has become the name, not of the yellow species only, but of the whole class. And, though its form is unmutilated, and its composition as clear as on the day when the words were first put together to make it, probably not one person in a hundred of those who employ it has ever thought of its origin, or considered why it was applied to the use in which it serves him. We no longer invest it with the paltry and prosaic associations which, from its derivation, would naturally cluster about it; it has become, from long alliance in our thoughts with the elegant creatures which it designates, instinct with poetic beauty and grace.

Again, some ancient navigator, who discovered a certain huge island on the north-eastern coast of America, had not ingenuity enough to devise a better appellation for it than *the new-found land*. Such a name was evidently no more applicable to this than to any other of the newly-discovered

regions in that age of discovery, yet men learned by degrees to employ it as the proper title of this particular island. At first, doubtless, they pronounced it distinctly, *new-found land;* but no sooner had the words fully acquired the character of a specific name for a single thing, than they began to receive the stamp of formal unity, by the accentuation of one of the three syllables, and the subordination of the rest, in quantity and distinctness of tone. There was, to be sure, a difficulty about deciding which of three constituents of so nearly equal value should receive the principal stress of voice, and our practice varies even now between *Newfoúndland* and *Néwfoŭndland*, while we occasionally even hear *Newfoŭndlánd:* but good usage will finally decide in favour of one of these modes, and will reject the others. How little is the primary meaning of the compound present to the minds of those who utter it! And when, transferring the name of the island to one of its most noted products, we speak of some one as "the fortunate owner of a fine Newfoundland," how little we realize that, in terms, we are asserting his lordship over a recently discovered territory!

The two words which we have instanced have suffered no modification, or only a very slight one, of their original form since they were put together out of separate elements. But it is clear enough that this readiness to forget the etymological meaning of a word in favour of its derivative application, to sink its native condition in its official character, prepares the way for mutilation and mutation. We have put together, to form the title of a certain petty naval officer, the two words *boat* and *swain*, and we know what the word means, and why: the sailors, too, know what, but the why is a matter of indifference to them; they have no leisure for a full pronunciation of such cumbrous compounds as *bōat-swāin;* they cut it down to *bos'n;* and it is a chance if a single one among them who has not learned to read and write can tell you how he of the whistle comes by such a title. So also, the mariner calls *to'gal'nts'ls* what we land-lubbers know by the more etymologically correct, but more lumbering, name of *topgallantsails*. And these are but typical examples of what has been the history of language from the

beginning. No sooner have men coined a word than they have begun—not, of course, with deliberate forethought, but spontaneously, and as it were unconsciously—to see how the time and labour expended in its utterance could be economized, how any complicated and difficult combination of sounds which it presented could be worked over into a shape better adapted for fluent utterance, how it could be contracted into a briefer form, what part of it could be spared without loss of intelligibility.

Thus—to recur to some of our former illustrations—as soon as we are ready to forego our separate memory of the constituents of such compounds as *breāk-fāst, fōre-hĕad, fourteen-night*, that we may give a more concentrated attention to the unity of signification which we confer upon them, we begin to convert them into *brĕakfast, fōre'd, fōrtnĭt*. And the case is the same with all those combinations out of which grow formative elements and forms. While we have clearly in mind the genesis of *god-like, father-like*, and so forth, we are little likely to mutilate either part of them: our apprehension of the latter element as no longer coördinate with the former, but as an appendage to it, impressing upon it a modification of meaning, and our reduction of the subordinate element to *ly*, thus turning the words into *godly* and *fatherly*, are processes that go hand in hand together, each helping the other.

This brings us to a recognition of the important and valuable part played by the tendency to ease of utterance, and by the phonetic changes which it prompts, in the construction of the fabric of language. If a word is to be taken fully out of the condition of constituent member of a compound, and made a formative element, if a compound is thus to be converted into a form, or otherwise fused together into an integral word, it must be by the help of some external modification. Our words *thankful, fearful, truthful*, and their like, are, by our too present apprehension of the independent significance of their final syllable, kept out of the category of pure derivatives. Phonetic corruption makes the difference between a genuine form-word, like *godly*, and a combination like *godlike*, which is far less plastic and adaptable to the varying needs of practical use; it makes the

difference between a synthetic combination, like *I loved*, and a mere analytic collocation, like *I did love*. It alone renders possible true grammatical forms, which make the wealth and power of every inflective language. We sometimes laugh at the unwieldiness of the compounds which our neighbour language, the German, so abundantly admits; words like *Rittergutsbesitzer*, 'knight's-property-possessor,' or *Schuhmacherhandwerk*, 'cobbler's-trade,' seem to us too cumbrous for use; but half the vocables in our own tongue would be as bulky and awkward, but for the abbreviation which phonetic change has wrought upon them. Without it, such complicated derivatives as *untruthfully*, *inapplicabilities*, would have no advantage over the tedious paraphrases with which we should now render their precise etymological meaning.

Change, retrenchment, mutilation, disguise of derivation is, then, both the inevitable and the desirable accompaniment of such composition as has formed the vocabulary of our spoken tongue. It stands connected with tendencies of essential consequence, and is part of the wise economy of speech. It contributes to conciseness and force of expression. It is the sign and means of the integration of words. It disencumbers terms of traditional remembrances, which would otherwise disturb the unity of attention that ought to be concentrated upon the sign in its relation to the thing signified. It makes of a word, instead of a congeries of independent entities, held together by a loose bond and equally crowding themselves upon the apprehension, a unity, composed of duly subordinated parts.

But the tendency which works out these valuable results is, at the same time, a blind, or, to speak more exactly, an unreflecting one, and its action is also in no small measure destructive; it pulls down the very edifice which it helps to build. Its direct aim is simply ease and convenience; it seeks, as we have seen, to save time and labour to the users of language. There may be, it is evident, waste as well as economy in the gratification of such a tendency; abbreviation may be carried beyond the limits of that which can be well dispensed with; ease and convenience may be consulted by the sacrifice of what is of worth, as well as by the rejection

of what is unnecessary. No language, indeed, in the mouths of a people not undergoing mental and moral impoverishment, gives up, upon the whole, any of its resources of expression, lets go aught of essential value for which it does not retain or provide an equivalent. But an item may be dropped here and there, which, upon reflection, seems a regrettable loss. And a language may, at least, become greatly altered by the excessive prevalence of the wearing-out processes, abandoning much which in other and kindred languages is retained and valued. It is the more necessary that we take notice of the disorganizing and destructive workings of this tendency, inasmuch as our English speech is, above all other cultivated tongues upon the face of the earth, the one in which they have brought about the most radical and sweeping changes.

It has already been remarked (p. 62) that, in the earliest traceable stage of growth of our language, the first person singular of its verbs was formed by an ending *mi*, of which the *m* in *am* is a relic, and the only one which we have left. In Latin, too, it remains in the present indicative of only two words, *sum* and *inquam*, and in Greek, in the comparatively small class of "verbs in *mi*," like *tithēmi*, *didōmi*. But the history of verbal conjugation can be better illustrated by considering the changes wrought upon another set of endings, those of the plural. At the same early period of its development, the tongue from which ours is descended had an elaborate series of terminations to denote the first, second, and third persons plural of its verbs. In the oldest form in which we can trace them—when, however, they had already acquired the character of true formative elements—they were *masi*, *tasi*, and *nti*. By origin, they were pronominal compounds, which had "grown on" to the end of the verbal root—that is to say, had first been habitually spoken in connection with the root, then attached to it, and finally integrated with it, in the manner already illustrated: they meant respectively, 'I and thou', i.e. 'we'; 'he and thou', i.e. 'ye'; and 'they'. Thus *lagamasi*, *lagatasi*, *laganti*, for instance, signified at first, in a manner patent to every speaker's apprehension, 'lie-we', 'lie-ye', 'lie-they': it would

have seemed as superfluous, in using these forms, to put the subject pronouns a second time before them, as it would seem to us now to say *I did loved*, for *I loved*. But the consciousness of the origin of the endings becoming dimmed, and their independent meaning lost from view, they were left to undergo the inevitable process of reduction to a simpler form. As they appear in the Latin, they have suffered a first process of abbreviation, by rejection of the final vowel of each: they have become *mus*, *tis*, and *nt*, as in *legimus*, *legitis*, *legunt*, 'we read, ye read, they read.' The ancient Gothic, the most primitive of the Germanic dialects, exhibits them in a yet succincter form, the first two having been cut down to their initial letter only: thus, *ligam*, *ligith*, *ligand*. Thus far, each ending has, through all its changes, preserved its identity, and is adequate to its office; however mutilated and corrupted in form, they are still well distinguished from one another, and sufficiently characteristic. But it was now coming to be usual to put the pronouns before the verb in speaking. At first added occasionally, for greater emphasis, they had, as the pronominal character of the endings faded altogether from memory, become customary attendants of the verb in all the persons—save as, in the third person, their place was taken by the more varied subjects which that person admits. Since, then, the expressed subjects were of themselves enough to indicate the person, distinctive endings were no longer needed. Under the influence of this consideration, the Anglo-Saxon had reduced all the plural terminations to one—*ath* in the present, *on* in the imperfect—saying *we licgath*, *ge licgath*, *hi licgath*. Although this last was, in its inception, much such a blunder as is now committed by the vulgar among ourselves who say *I is*, *says I*, and so on, it was adopted and ratified by the community, because it was only a carrying out of the legitimate tendency to neglect and eliminate distinctions which are practically unnecessary; and all the other Germanic dialects have done the same thing, in whole or in part. We, finally, have carried the process to its furthest possible limit, by casting off the suffixes altogether; and with them, in this particular verb, even the final consonant of the root: as we say *I lie*, so we also say *we lie*, *ye lie*, *they lie*.

We do not feel that we have thus sacrificed aught of that distinctness of expression which should be aimed at in language; *we lie* is not less unambiguous than *lagamasi;* it is, in fact, a composition of equivalent elements in another mode; just as *I did love* is, in a different form, the same combination with *I loved.*

In the declension of our nouns we have effected a more thorough revolution, if that be possible, than in the conjugation of our verbs. The ancient tongue from which our English is the remote descendant inflected its nouns, substantive and adjective, in three numbers, each containing eight cases. Of the numbers, the Anglo-Saxon had almost wholly given up one, the dual, retaining only scanty relics of it in the pronouns; and, of the cases, it had in familiar use but four—the nominative, genitive, dative, and accusative—with traces of a fifth, the instrumental. The dual, indeed, on account of its little practical value, has disappeared in nearly all the modern languages of our family, its duties being assumed by the plural; and the prepositions have long been usurping the office of the case-endings, and rendering these dispensable. In English, now, all inflection of the adjective has gone out of use, and we have saved for our substantives only one of the cases, the genitive or possessive—to which a few of the pronouns add also an accusative or objective: thus, *he, his, him, they, their, them,* etc. Here, too, we should be loth to acknowledge that we have given up what the true purposes of language required us to keep, that we can speak our minds any less distinctly than our ancestors could, with all their apparatus of inflections.

A remarkable example of the total abandonment of a conspicuous department of grammatical structure, without any compensating substitution, is furnished in our treatment of the matter of gender. The grammatical distinction of words as masculine, feminine, or neuter, by differences of termination and differences of declension, had been from the very earliest period the practice of all the languages of the family to which the English belongs. It was applied not alone to names of objects actually possessed of sex, but to all, of whatever kind, even to intellectual and abstract terms; the whole language was the scene of an immense personification, where-

by sexual qualities were attributed to everything in the world both of nature and of mind: often on the ground of conceptions and analogies which we find it excessively difficult to recognize and appreciate. This state of things still prevailed in the Anglo-Saxon: nouns were masculine, feminine, and neuter, according to the ancient tradition (for example, *tôth*, 'tooth,' was masculine; *syn*, 'sin,' was feminine; and *wîf*, 'wife, woman,' was neuter); and every adjective and adjective-pronoun was declined in the three genders, and made to agree with its noun in gender as well as in number and case, just as if it were Latin or Greek. But in that vast decay and ruin of grammatical forms which attended the elaboration of our modern English out of its Saxon and Norman elements, the distinctive suffixes of gender and declension have disappeared along with the rest; and with them has disappeared this whole scheme of artificial distinctions, of such immemorial antiquity and wide acceptance. It has completely passed from our memory and our conception, leaving not a trace behind; the few pronominal forms indicative of sex which we have saved—namely, *he*, *she*, *it*, *his* and *him*, *her*, and *its*—we use only according to the requirements of actual sex or its absence, or to help a poetic personification; and we think it very inconvenient, and even hardly fair, that, in learning French and German, we are called upon to burden ourselves with arbitrary and unpractical distinctions of grammatical gender.

The disposition to rid our words of whatever in them is superfluous, or can be spared without detriment to distinctness of expression, has led in our language, as in many others, to curious replacements of an earlier mode of indicating meaning by one of later date, and of inorganic origin—that is to say, not produced for the purpose to which it is applied. Thus we have a few plurals, of which *men* from *man*, *feet* from *foot*, and *mice* from *mouse* are familiar examples, which constitute noteworthy exceptions to our general rule for the formation of the plural number. Comparison of the older dialects soon shows us that the change of vowel in such words as these was originally an accident only; in was not significant, but euphonic; it was called out

by the vowels of certain case-endings, which assimilated the vowels of the nouns to which they were attached. So little was the altered vowel in Anglo-Saxon a sign of plurality, that it was found also in one of the singular cases, while two of the plural cases exhibited the unchanged vowel of the theme. *Man*, for instance, was thus declined:

	Singular.		*Plural.*	
Nom.	*man*,	'man';	*men*,	'men.'
Gen.	*mannes*,	'man's';	*manna*,	'men's.'
Dat.	*men*,	'to man';	*mannum*,	'to men.'
Accus.	*man*,	'man';	*men*,	'men.'

But the nominative and accusative singular exhibited one vowel, and the nominative and accusative plural another; and so this incidental difference of pronunciation between the forms of most frequent occurrence in the two numbers respectively came to appear before the popular apprehension as indicative of the distinction of number; its genesis was already long forgotten, as the case-endings which called it out had disappeared; and now it was fully invested with a new office—though only in a few rather arbitrarily selected cases: the word *book*, for example, has the same hereditary right to a plural *beek*, instead of *books*, as has *foot* to a plural *feet*, instead of *foots*.* The case is quite the same as if, at present, because we pronounce *năt̆ional* (with "short *a*") the adjective derived from *nation*, we should come finally to neglect as unnecessary the suffix *al*, and should allow *nation* and *năt̆ion* to answer to one another as corresponding substantive and adjective.

A very similar case of substitution of distinctions originally accidental for others of formal and organic growth appears also in some of our verbs. From *dælan*, 'to deal,' the Anglo-Saxon formed, by the usual suffixes of conjugation, the imperfect *dælde* and the participle *dæled*. In our mouthing over of these forms to suit our ideas of convenient pronunciation, we have established a difference of vowel sound among them, saying *I dēal*, but *he dĕalt* and *we have dĕalt*. Here is an internal distinction, of euphonic

* The plural of *bôc* in Anglo-Saxon is *bêc*, as that of *fôt* is *fêt*.

origin, accompanying and auxiliary to the external distinction of conjugational endings. But, among the not inconsiderable number of verbs exhibiting this secondary change of vowel, there are a few, ending in *d*, in which we have elevated it to a primary rank, casting away the endings as inconvenient and unnecessary. Thus, where the Anglo-Saxon says *lædan, lædde, læded*, and *rædan, rædde, ræded*, we say *I lēad, he lĕd, we have lĕd*, and *I rēad, he rĕad, we have rĕad*—not even taking the trouble, in the latter instance, to vary the spelling to conform to the pronunciation.

Yet another analogous phenomenon has a much higher antiquity, wider prevalence, and greater importance, among the languages of the Germanic family: it is the change of radical vowel in what we usually call the "irregular" conjugation of verbs. The imperfect and participle of *sing*, for example, are distinguished from one another and from the present solely by a difference of vowel: thus, *sing, sang, sung*. Other verbs exhibit only a twofold change, their participle agreeing with either the present or the imperfect; thus, *come, came, come; bind, bound, bound*. That this mode of conjugation is Germanic only, proves that it arose after the separation of the Germanic languages from the greater family of which these form a branch. It is, in fact, like the other changes of vowel in declension and conjugation which we have just been considering, of euphonic origin, and it has acquired its present value and significance in comparatively modern times: indeed, the English alone has suffered it to reach its full development as a means of grammatical expression, by generally rejecting all aid from other sources than the variation of vowels in distinguishing the verbal forms from one another. In the Anglo-Saxon, it still wore in great measure a euphonic aspect: that language had its separate affixes for the infinitive and participle; it said *singan*, 'to sing,' and *sungen*, 'sung;' and its present, *ic singe*, and its preterit, *ic sang*, were distinguished in every person but one by terminations of different form: the varying scale of vowels, then, was only auxiliary to the sense, not essential —and it had, and still has, to a considerable extent, the

same value in the other Germanic dialects, ancient and modern. Moreover, there were other frequent changes of vowel in verbal conjugation, in other forms than these: the second and third persons singular present often differed from the first, and in a very large class of verbs the preterit plural differed from the singular. Thus, from *helpan*, 'to help', for example, we have *ic helpe*, 'I help'; *he hylpth*, 'he helpeth'; *ic healp*, 'I helped'; *we hulpon*, 'we helped'; and finally *holpen*, 'helped'—a fivefold play of vowel change. We, in our unconscious endeavour to utilize what was practically valuable in this condition of things, and to reject the rest from use, have retained and now admit, at most, a threefold variation, and have made it directly and independently significant, by casting away the needless terminations.

An interesting illustration of the way in which phonetic corruption sometimes creates a necessity for new forms, and leads to their production, is to be noted in connection with this subject. The Germanic preterits were originally formed by means of a reduplication, like the Greek and some of the Latin perfects;* but the variation of a radical vowel had, to no small extent, supplanted it, assuming its office and causing its disappearance in the great majority of ancient verbs. Its recognition as the sign of past meaning, and its application to the formation of preterits from new verbs, were thus broken up and rendered ineffective. At the same time, the change of vowel was too irregular and seemingly capricious to supply its place in such uses; there was no single analogy presented before the minds of the language-makers, which could be securely and intelligently followed. Hence, for all derivative and denominative verbs —additions by which every language is constantly enriching its stores of verbal expression—a new kind of past tense had to be formed, by composition with the old reduplicated preterit *did*, as has been already explained. This being soon converted into a suffix, and the number of preterits formed by means of it increasing greatly and rapidly, it became by degrees the more common indicator of past action, and was

* See below, lecture vii. p. 268.

recognized as such by the popular apprehension. From that time, it began to exhibit a tendency to extend its sphere of application at the expense of the more ancient modes of forming the preterit tense—the same tendency which shows itself so noticeably now in every child who learns the English language, inclining him to say *I bringed, I goed, I seed,* until with much pains he is taught the various "irregular" forms, and is made to employ them as prevailing usage directs. Prevailing usage has in our language already ratified a host of such blunders; a large portion of the ancient Germanic verbs, formerly inflected after the analogy of *sing, come, bind, give,* and their like, we now conjugate "regularly." One instance we have had occasion to notice above—the verb *help,* of which the ancient participle *holpen,* instead of *helped,* is still to be found in our English Bibles: others are *bake, creep, fold, leap, laugh, smoke, starve, wade, wield.*

Further examples of the same tendency toward extension of prevailing analogies beyond their historically correct limits are to be seen in the present declension of our nouns. The letter *s* is, with us, the sign of all possessive cases, not in the singular number alone, but in the plural also of such words as do not form their plural in *s;* thus, *man's, men's; child's, children's.* In the Anglo-Saxon, it was the genitive ending of the singular only, and by no means in all nouns: the feminines, without exception, and many masculines and neuters, formed their genitives in other ways. But it was the possessive sign in a majority of substantives, and there was no other distinctive ending which had the same office; and accordingly, it came to be so associated with the relation of possession in the minds of English speakers, that, in the great change and simplification of grammatical apparatus which attended the transition of Anglo-Saxon into English, its use was gradually extended, till at last no exceptions were left. A like treatment has given our plural suffix the range of application which it now exhibits. Less than half the Anglo-Saxon nouns had plurals in *s:* it was restricted to a single gender, the masculine, nor did it even form all the masculine plurals; while, in our usage, it is almost universal, the only exceptions being the anomalous forms already

referred to (*men*, *mice*, *feet*, etc.), and the few words, like *oxen* from *ox*, in which we have retained relics of another mode of declension, once belonging to a large class of nouns. The prevalence which this suffix has attained in our language has been plausibly conjectured to be in part due to the influence of the French-speaking Normans, in whose own tongue *s* was the plural-sign in all nouns, having become such by a similar extension of its original Latin use.

This extensibility of application is a part of the essential and indispensable character of a formative element. We have not to go over and over again with the primitive act of composition and the subsequent reduction, in each separate case. It needs only that there be words enough in familiar use in a language, in which a certain added element distinctly impresses a certain modification of meaning upon certain plainly recognizable primitives, and we establish a direct association between that element and the given modification of meaning, and are ready to apply the former wherever we wish to signify the latter. The ending *ly*, for instance, we use when we want to make an adverb, without any thought of whether the adjective *like* would or would not be properly combinable with the word to which we add the ending. This alone makes it possible to mobilize, so to speak, our linguistic material, to use our old and new words in all the circumstances among which they are liable to fall. We adopt into our common speech a new term like *telegraph;* it was manufactured out of the stores of expression of the ancient Greek language, by some man versed in that classic tongue, and is implicitly accepted, under the sanction and recommendation of the learned, by the public at large, who neither know nor care for its etymology, who know only that they want a name for a thing, and that this answers their purpose. It thus becomes to all intents and purposes an English word, a naturalized citizen in our tongue, invested with all the rights and duties of a native—and divested, also, of those which belonged to it by hereditary descent, among its own kith and kin. We proceed, accordingly, to apply to it a whole apparatus of English inflections, long since worked out by the processes of linguistic change, and

not yet destroyed by the same processes. We make of it a verb, in various forms: *he telegraphs, they telegraphed, I shall telegraph, we are telegraphing,* the art of *telegraphing;* other nouns come from it, as *telegrapher, telegraphist, telegraphy;* we can turn it into an adjective, *telegraphic;* and this, again, into an adverb, *telegraphically.* Historical congruency is the last thing we think of in all this. To a Greek word we add, without compunction, endings of wholly diverse descent: the greater part are Germanic, coming down to us from the Anglo-Saxon; but one or two, *ic, ical,* are Latin; and at least one, *ist,* comes ultimately from the Greek. Made up, as our English language is, out of two diverse tongues, Anglo-Saxon and Norman-French, and with more or less intermixture of many others, such a condition of things could not be avoided; it is, while practically one homogeneous tongue, historically a composite structure, both in vocabulary and in grammar. Its grammatical apparatus, its system of mobile endings, whereby words may be derived, inflected, and varied, is, indeed, in its larger and more essential part Germanic; but it is also in no insignificant measure Latin; while hosts of Latin words receive Germanic endings, not a few Germanic words appear invested with Latin and French affixes, which have more or less fully acquired in our use the value of formative elements: such are *dis-belief, re-light, for-bear-ance, atone-ment, odd-ity, huntr-ess, eat-able, talk-ative.**

Hitherto we have taken note only of those effects of the wearing-out process in language which lead to the substitution of one means of expression for another, or which, as in the case of grammatical gender, do away with luxuries of expression which any tongue can well afford to dispense with. But that popular use is not content with abolishing distinctions which are wanting in practical value, with giving up what is otherwise replaced, or can be spared without loss, we shall be fully persuaded, if we merely note what is all the time going on around us. The wholly regrettable inaccuracies of heedless speakers, their confusion of things which ought to be carefully held apart, their obliteration of

* These examples are taken from Professor Hadley's "Brief History of the English Language," prefixed to the latest edition of Webster's Dictionary.

valuable distinctions—all these are part and parcel of the ceaseless changes of language, and not essentially different from the rest; they are only that part against which the best public sentiment, a healthy feeling for the conservation of linguistic integrity, arrays itself most strongly, and which therefore are either kept down altogether, or come but slowly and sparingly to acceptance. Let us note a few instances of such linguistic degeneration.

There is in English a long-standing tendency to efface the distinction of form between the imperfect and participle, usually assimilating the former to the latter, though not infrequently also the latter to the former. *Spoke* and *broke*, for *spake* and *brake*, *held* for *holden*, and many others, are of recent acceptance, but now impregnably established; from *begin*, and a considerable class of like verbs, the two forms *he began* and *he begun*, and so forth, are in nearly equal favour;* *he come* for *he came*, *I done* for *I did*, and others like them, are still blunders and vulgarisms; and we may hope that they will always continue such. These alterations find support in one of the analogies of the language, which has doubtless done much to call them forth. In our regular verbs, namely, there is an entire coincidence of form between the preterit and participle. The careless speaker reasons—not consciously, but in effect—thus: If I say *I gained* and *I have gained*, *I dealt* and *I have dealt*, why not also *I sung* and *I have sung*, *he drank* and *he has drank*, *we held* and *we have held*, *they done* and *they have done?*

It is not often, perhaps, that the preterit and participle will stand in connections which fail to show distinctly which form is meant by the speaker or writer. But we have also a few verbs—of which *put* is a familiar example—in which all distinction of present and preterit is likewise lost: if we say *they put*, the general requirements of the sense alone can point out the tense, just as if the phrase were so much Chinese.

* This variation is of ancient date, and doubtless founded upon the fact that, in many verbs of the class, the vowels were unlike in the singular and plural of the preterit: thus, from *singan*, the Anglo-Saxon has *he sang*, but *we sungon*.

The common confusion of *learn* and *teach*, as in "*I learnt* him to swim," is another case of a somewhat similar character, being also favoured by a recognized usage of our language, which permits us in numerous instances to employ a verb in both a simple and a causative sense. We say correctly "the ship *ran* aground" and "they *ran* it aground"; why not as well "the boy *learned* his lesson" and "they *learned* him his lesson"?

A reprehensible popular inaccuracy—commencing in this country, I believe, at the South or among the Irish, but lately making very alarming progress northward, and through almost all classes of the community—is threatening to wipe out in the first persons of our futures the distinction between the two auxiliaries *shall* and *will*, casting away the former, and putting the latter in its place. The Southerner says: "It is certain that we *will* fail," "I *would* try in vain to thank you." To say *I shall* in circumstances where we should say *he will*, to put *we should* where good usage would require *they would*, seems to these people, who have never investigated either the history or the philosophy of the difference of the phraseology in the two persons, an inconsistency which may and should be avoided. The matter, however, is one which implies a violation not only of good English usage, but also of sound etymological morality: *shall* originally and properly contains the idea of duty, and *will* that of resolve; and to disregard obligation in the laying out of future action, making arbitrary resolve the sole guide, is a lesson which the community ought not to learn from any section or class, in language any more than in political and social conduct.

Once more, our verb has long been undergoing a process of impoverishment by the obliteration of its subjunctive mood. This had begun even in the Anglo-Saxon, by the partial loss of the distinctive signs of subjunctive meaning, and the assimilation of the subjunctive and indicative forms. The wearing-off of inflections since that period has nearly finished the work, by wiping out, in almost every verb in the language, all formal distinction between the two moods, except in the second and third persons singular present and the second

singular preterit: there, it was still possible to say *if thou love, if he love, if thou loved*, instead of *thou lovest, he loves, thou lovedst*. But the second persons have become of so rare use with us that they could render little aid in keeping alive in the minds of speakers the apprehension of the subjunctive: it virtually rested solely upon the single form *if he love*. No wonder, then, that the distinction, so weakly sustained, became an evanescent one; in *if they love, if we loved*, and so on, forms apparently indicative answered sufficiently well the purpose of conditional expression; why not also in the third person singular? Under the influence of such considerations, it has become equally allowable to write *if he loves* and *if he love*, even in careful and elegant styles of composition, while the latter is but very rarely heard in colloquial discourse. Only in the verb *to be*, whose subjunctive forms were more plainly, and in more persons, distinguished from the indicative, have they maintained themselves more firmly in use: to say *if I was, if he was*, for *if I were, if he were*, is even now decidedly careless and inelegant.

What has been given must suffice as illustration of the abbreviation of forms, the mutilation and wearing out of formative elements. But this, though a fundamentally and conspicuously important part of the phonetic history of a language, is only a part: the same tendency, to economize the time and labour expended in speaking, to make the utterance of words more easy and convenient, shows itself in a great variety of other ways. None of the articulate elements of which our vocables are composed are exempt from alteration under the operation of this tendency; while a word continues to maintain its general structure and grammatical form, it is liable to change by the conversion of some of its sounds into others, by omission, even by addition or insertion. The subject of phonetic change in language is too vast, and runs out into a too infinite detail, to be treated here with any fulness: we can only attempt to direct our attention to its most important features and guiding principles.

Each one of the sounds composing our spoken alphabet is produced by an effort in which the lungs, the throat, and the organs of the mouth bear a part. The lungs furnish the

rough material, an expulsion of air, in greater or less force; the vocal cords in the larynx, by their approximation and vibration, give to this material resonance and tone; while it receives its final form, its articulate character, by the modifying action of the tongue, palate, and lips. Each articulation thus represents a certain position of the shaping organs of the mouth, through which a certain kind and amount of material is emitted. A word is composed of a series of such articulations, and implies a succession of changes of position in the mouth-organs, often accompanied by changes in the action of the larynx upon the passing column of air. Thus, for example, in the word *friendly*. At first, the tips of the upper teeth are pressed upon the edge of the lower lip, and simple breath, not intonated in the larynx, is forced out between the two organs: the rustling thus produced is the *f*-sound. The teeth and lips are now released from service, and the tip of the tongue is brought near to the roof of the mouth at a point a little way behind the gums; at the same instant, the vocal cords are raised and strained, so that the escaping air sets them in vibration and becomes sonant; tone, instead of mere breath, is expelled; and the sound of *r* is heard. Next the tongue is moved again; its point is depressed in the mouth, and its middle raised toward the palate, yet not so near but that the sonant breath comes forth freely, giving an opener, a more sonorous and continuable tone than either of the preceding positions yielded: this we call a vowel, short *e*. Once more the tip of the tongue approaches the upper part of the mouth behind the teeth, and this time forms a close contact there, cutting off all exit of the breath through the oral passage; but the passage of the nose is opened for its escape, and we hear the nasal *n*. To produce the next sound, *d*, the only change needed is the closure of the nasal passage; the mouth and nose being both shut, no emission of breath is possible; yet the tone does not cease; breath enough to support for an instant the sonant vibration of the vocal cords is forced up into the closed cavity of the mouth, behind the tongue: were the vibration and tone intermitted during the instant of closure, the sound uttered would be a *t*, instead of a *d*. Before the oral cavity is so full

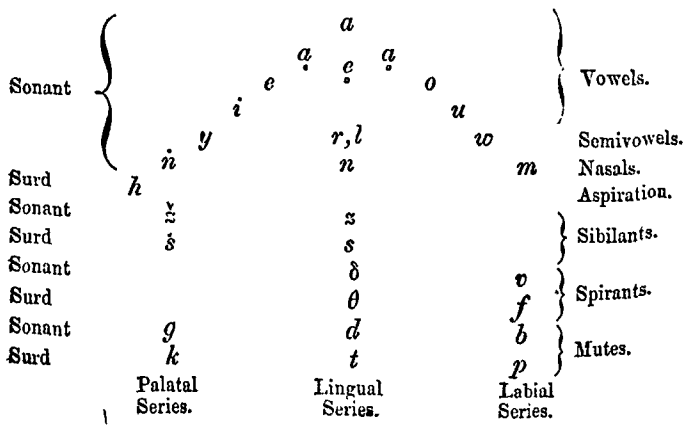
that the sonant utterance can be no longer sustained, the contact of the tongue with the roof of the mouth is broken at its sides, but kept up at its tip, in which position the continuance of intonated emission generates an *l*. Finally, the tongue is released at the tip and elevated in the middle, to a posture nearly the same with that in which the former vowel was spoken, only a little closer, and we have another vowel, a short *i*. Here, unless some other word immediately follows, the process is ended, and inarticulate breathing is commenced again. Thus, during the pronunciation of so brief and simple a word, the mouth-organs have been compelled to assume in succession seven different positions: but all their movements have been made with such rapidity and precision, one position has followed another so closely and accurately, that no intermediate sounds, no slides from one to another, have been apprehended by the ear; it has heard only the seven articulations. The action of the throat has varied once; passing without modification the breath expended in uttering the *f*, it has intonated, in one unbroken stream, all that followed. The general effort of utterance, too, the degree of exertion put forth by the lungs, has not been the same throughout: the former part of the word has been accented—that is to say, spoken with a fuller and stronger tone—with which effect, when not contravened by the emphasis, or tone of the sentence, a slight rise of musical pitch is wont to ally itself. And yet once more, we have to note that our word, whether we regard it as seven-fold or as one-fold in respect to the action of the articulating organs, presents itself to our apprehension as a two-fold entity: it is dissyllabic. This property, the foundation of which is in the ear of the hearer rather than in the mouth of the speaker, depends upon the antithesis of the opener and closer sounds composing the word: the comparatively open and resonant vowels strike the ear as the prominent and principal constituents of the series, while the closer consonants appear as their adjuncts, separating at the same time that they connect them.

This example brings to light the principal elements which enter into the structure of spoken signs for ideas, and which have to be taken into account in all inquiries into the phonetic

history of language. Each constituent of the spoken alphabet requires, in order to its production, a certain kind and amount of effort on the part of the various organs concerned in articulate utterance. Some of them call for greater change from the quiescent condition of the organs, and so are in themselves harder to utter, than others. And again—what is of far higher importance in phonology—some are much harder to utter than others in connection with one another; the changes of position and mode of action of the articulating organs which they imply are more difficult of production and combination. Thus, it is perfectly practicable to arrange the sounds composing the word *friendly* in such ways as to give very harsh combinations, which, although we may make shift to utter them by a great effort, we should ordinarily and properly call unpronounceable: for example, *ŋfdrely*, *lrefdny*, *yrfdnle*. And our word itself, easy as it seems to us, would be deemed harsh and unpronounceable by many a race and nation of men. It is all a question of degree, of the amount of labour to which we are willing to subject our articulating organs in speaking. Hosts of series of sounds may be made up which, though not unutterable by dint of devoted and vehement exertion, never appear in actual speech, because they are practically too hard; their cost is greater than their value; the needs of speech can be supplied without resorting to them. And half the languages in the world have sounds and combinations of sounds which other tongues eschew as being harder than they choose to utter. No word that a community has once formed and uttered is incapable of being kept unchanged in their use; yet use breeds change in all the constituents of every language: each sound in a word exercises an assimilating influence over the others in its neighbourhood, tending to bring them into some other form which is more easily uttered in connection with itself. The seat of "euphony," as we somewhat mistakenly term it, is in the mouth, not in the ear; words are changed in phonetic structure, not according to the impression they make upon the organs of hearing, but according to the action which they call for in the organs of speaking; physiological, not acoustic relations determine how sounds shall pass into one another in the process of linguistic growth.

A spoken alphabet, then, in order to be understood, must be arranged upon a physiological plan. It is no chaos, but an orderly system of articulations, with ties of relationship running through it in every direction. It has its natural limits, divisions, and lines of arrangement. It is composed of series of sounds, produced each in its own part of the mouth, by different degrees of approximation of the same organs. According to these different degrees of approximation, mainly, it is separated into classes: the opener sounds we call vowels; the closer, consonants; and, upon the limit between the two are sounds—like *l*, *r*, *n* in English—which are capable of use as either consonants or vowels. The consonants, again, are subdivided into classes of lesser extent, also determined by their correspondence in respect to measure of openness, resonance, and continuability: such are the semivowels, the nasals, the fricatives (which may be further subdivided into sibilants and spirants), and the mutes. And, after a certain grade of closeness is reached, each position of the mouth-organs gives rise to two distinct sounds, sonant and surd, according as intonated or unintonated breath is expelled through it.

The English spoken alphabet, arranged according to this method, presents the following scheme:*



* For a fuller explanation and establishment of this method of arrange-

The scale of these lectures does not require us to enter into a more detailed examination of the organs of speech and their product, articulate sounds, or a more exact definition of the physical relations of articulate sounds, than has thus been given. The principal and most frequent phonetic transitions are sufficiently explained by our alphabetic scheme. Let us notice a few of them.

The conversion of a surd letter into its corresponding sonant, or of sonant into surd, is abundantly illustrated in the history of every language. Our own plural sign, *s*, is pronounced as *s* only when it follows another surd consonant, as in *plants*, *cakes*; after a sonant consonant or a vowel, it becomes *z*, as in *eyes*, *pins*, *pegs*. A like change is common between two vowels, as in *busy*; the vowel intonation being continued through the intervening consonant, instead of intermitted during its utterance. So, on the other hand, we turn a *d* into a *t* after another surd consonant, where a sonant would be only with difficulty pronounced, as in *looked* (*lookt*); and the German eliminates the intonation from all his final mutes, speaking *kind*, *kalb*, as if they were written *kint*, *kalp*. Sounds of the same series, but of different classes, easily pass into one another: thus, the spirants (*f*, *th*, and so on) are almost universally derived from the full mutes, by a substitution of a close approximation (usually accompanied, it is true, by a slight shifting of position) for the full mute contact; and they

ment of the alphabet, see the author's papers on the Standard Alphabet of Professor Lepsius, in the Journal of the American Oriental Society, vol. vii., pp. 299—332, and vol. viii., pp. 335—373. The signs used in the scheme are those of the Lepsian system. Thus, *a* represents the sound in *fär*; *ą*, in *făt*; *e*, in *thĕn* and *thēy*; *i*, in *pĭn* and *pīque*; *ą̊*, in *whăt* and *ăll*; *o*, in *nōte*; *u*, in *fŭll* and *rūle*; *e̊*, in *bŭn* and *bŭrn*; *ż*, the *z* of *azure*; *ş*, the *sh* of *shun*; *ð*, the *th* of *that*; *θ*, the *th* of *thin*. The distinction of long and short vowels, although it is in every case founded on a difference of quality as well as quantity, is here, for convenience's sake, omitted; as are also the diphthongs *ai*, *au*, and *ǫi*, as in *pint*, *pound*, *point* (of which the two first are rather vocal slides than diphthongs). The compound consonants *ch* and *j*, in *church*, *judge*, have also strictly a right to separate representation; since, though their final element respectively is *ş* and *ż*, their initial element is not precisely our usual *t* and *d*, but one of another quality, more palatal. Were all these differences of utterance noted by separate characters, our written alphabet would contain forty-two signs, instead of the thirty given above.

come especially from such mutes as were originally aspirated—that is to say, had an audible bit of an *h* pronounced after them, before the following sound: the way in which they are often written, as *ph*, *th*, *ch* (German), is a result and evidence of this their origin. A *v*, too, has in many languages taken the place of an earlier semivowel *w*. Of the transition of the spirant *th* into the sibilant *s* a notable example is offered in our substitution—now become universal except in antiquated and solemn styles—of *he loves* for *he loveth*: *s* as ending of the third person singular of verbs is rare in Chaucer, and quite unknown a little earlier. An *s* between vowels, instead of being turned into its own corresponding sonant, *z*, becomes sometimes the next opener sonant of the same series, namely *r*: this change prevails very extensively in many tongues, as the Sanskrit, Latin, Germanic; a familiar example of its effect is seen in our *were*, plural and subjunctive of *was*, which has retained the original sibilant. A less frequent and regular change puts in place of a letter of one series one belonging to the same class but a different series. Thus, when the English gave up in pronunciation its palatal spirant—still written in so many of our words with *gh*—while it usually simply silenced it, prolonging or strengthening, by way of compensation, the preceding vowel, as in *light*, *bough*, *Hugh*, it sometimes substituted the labial spirant *f*, as in *cough*, *trough*; and, in the latter word, a common popular error, doubtless going back to the time of first abandonment of the proper *gh* sound, substitutes the lingual spirant, *th*, pronouncing *troth*. So the Russians put *f* for *th*, turning *Theodore* into *Fedor*. Exchanges of the mutes of different organs with one another are not very seldom met with, though not so easy to illustrate with English instances: the *pent* of *pentagon* and the *quinq* of *quinquennial* are Greek and Latin versions of the same original word, which in our own tongue, moreover, has become *five*. We often hear persons who have a constitutional or habitual inaptness to pronounce an *r*, and who turn it into a *w*, or an *l*: *r* and *l*, indeed, throughout the history of language, are the most interchangeable of sounds. Combination of consonants leads with especial frequency to the assimilation of the one to the other:

our *ditto* is the Latin *dictum*, 'said'; we say *dis-join*, but *dif-fuse*; *in-different*, but *im-possible*; *ad-dict*, but *an-nul*, *ap-pend*, *as-sign*, *ac-cede*, *af-firm*, *ag-gress*, *al-lude*, *am-munition*.

If the consonants are thus variously liable to pass into one another, a yet higher degree of mobility belongs to the vowels. It is needless to go into particulars upon this point: the condition of our own vowel-system is a sufficient illustration of it. The letters *a*, *e*, *i*, *o*, *u* were originally devised and intended to represent the vowel-sounds in *far*, *prey*, *pique*, *pole*, and *rule*, respectively, and they still have those values, constantly or prevailingly, in most of the other languages which employ them. But, during the written period of our own tongue, the pronunciation of its vowels has undergone—partly under the influence of circumstances which are still clearly to be pointed out—very sweeping and extensive changes, while our words have continued to be spelt nearly as formerly; and the consequence has been a grand dislocation of our orthographical system, a divorcement of our written from our spoken alphabet. Our written vowels have from three to nine values each, and they are supplemented in use by a host of digraphs, of equally variable pronunciation; our spoken vowels have each from two to twelve written representatives. All the internal relations of our sounds are turned awry; what we call "long" and "short" *a*, or *i*, or *u*, or *e*, or *o*, are really no more related to one another as corresponding long and short, than *dog* and *cat*, *sun* and *moon*, are related to one another as corresponding male and female. With our consonants, also, the case is but little better than with our vowels: our words, as we write them, are full of silent and ambiguous signs of every class, unremoved ruins of an overthrown phonetic structure. And our sense of the fitness of things has become so debauched by our training in the midst of these vicious surroundings, that it seems to us natural and proper that the same sound should be written in many different ways, the same sign have many different sounds; the great majority of us seriously believe and soberly maintain that a historical is preferable to a phonetic spelling—that is to say, that it is better to write our words as we imagine that somebody else pronounced them a long time

since, than as we pronounce them ourselves; and an orthoepical corruption or anomaly, like *kyind* for *kind*, *dănce* for *dânce*, *neīther* for *nēither*, is less frowned on by public opinion, and has a better chance for adoption into general use, than any, the most obvious, improvement of orthography.

The illustrations of phonetic change which we have been considering concern, as was claimed for them at the outset, only the most frequent and easily explainable phenomena of their kind, those which are found to prevail more or less in almost every known language. But every language has its own peculiar history of phonetic development, its special laws of mutation, its caprices and idiosyncrasies, which no amount of learning and acuteness could enable the phonologist to foretell, and of which the full explanation often baffles his art. His work is historical, not prescriptive. He has to trace out the changes which have actually taken place in the spoken structure of language, and to discover, so far as he is able, their ground, in the physical character and relations of the sounds concerned, in the positions and motions of the articulating organs by which those sounds are produced. He is thus enabled to point out, in the great majority of cases, how it is that a certain sound, in this or that situation, should be easily and naturally dropped, or converted into such and such another sound. But with this, for the most part, he is obliged to content himself; his power to explain the motive of the change, why it is made in this word and not in that, why by this community and not by that other, is very limited. He cannot tell why sounds are found in the alphabet of one tongue which are unutterable by the speakers of another; why combinations which come without difficulty from the organs of one people are utterly eschewed by its neighbour and next of kin; why, for example, the Sanskrit will tolerate no two consonants at the end of a word, the Greek no consonant but *n*, *s*, or *r*, the Chinese none but a nasal, the Italian none at all: why the Polynesian will form no syllable which does not end with a vowel, or which begins with more than one consonant, while the English will bear as many as six or seven consonants about a single vowel (as in *splints*, *strands*, *twelfths*); why the accent in a Latin word has its place always determined by the quantity of the syllable before the last, and rests

either upon that syllable or the one that precedes it, while in Greek it may be given to either of the last three syllables, and is only partially regulated by quantity; why, again, the Irish and Bohemian lay the stress of voice invariably upon the first syllable of a word, and their near relations, the Welsh and Polish, as invariably upon the penult; others still, like the Russian and Sanskrit, submitting it to no restriction of place whatever. These, and the thousand other not less striking differences of phonetic structure and custom which might readily be pointed out, are national traits, results of differences of physical organization so subtile (if they exist at all), of influences of circumstance so recondite, of choice and habit so arbitrary and capricious, that they will never cease to elude the search of the investigator. But he will not, in his perplexity, think of ascribing even the most obscure and startling changes of sound to any other agency than that which brings about those contractions and conversions which are most obviously a relief to the organs of articulation: it is still the speakers of language, and they alone, who work over and elaborate the words they utter, suiting them to their convenience and their caprice. The final reason to which we are brought in every case, when historical and physical study have done their utmost, is but this: it hath pleased the community which used this word to make such an alteration in its form; and such and such considerations and analogies show the change to be one neither isolated nor mysterious. Except in single and exceptional cases, there is no such difference of structure in human mouths and throats that any human being, of whatever race, may not perfectly master the pronunciation of any human language, belonging to whatever other race—provided only his teaching begin early enough, before his organs have acquired by habit special capacities and incapacities. The collective disposition and ability of a community, working itself out under the guidance of circumstances, determines the phonetic form which the common tongue of the community shall wear. And as, in the first essays of any child at speaking, we may note not only natural errors and ready substitutions of one sound for another, common to nearly all children, but also one and another peculiar conversion, which seems the effect of mere whim, explainable

by nothing but individual caprice, so in the traditional transmission of language—which is but the same process of teaching children to speak, carried out upon a larger scale—we must look for similar cases of arbitrary phonetic transitions.

So important a part of the history of a language are its special methods of phonetic change, that, in investigating the relations of any dialect with its kindred dialects, the first step is to determine to what sounds in the latter its own sounds regularly correspond. Thus, on comparing English and German, we find that a *d* in the former usually agrees, not with a *d*, but with a *t*, in the latter; as is shown by *dance* and *tanz*, *day* and *tag*, *deep* and *tief*, *drink* and *trink*, and so on. In like manner, the German counterpart of an English *t* is *s* or *z*: compare *foot* and *fuss*, *tin* and *zinn*, *to* and *zu*, *two* and *zwei*, and the like; and a German *d* answers to our *th*, as in *die* for *the*, *dein* for *thine*, *bad* for *bath*. What is yet more extraordinary is the fact that, if we compare English with the older languages of our family—as with Latin, Greek, and Sanskrit—we discover the precise converse of this relation: as German *t* is English *d*, so English *t* is Latin *d* (compare *two* and *duo*); as German *d* is English *th*, so English *d* is Greek *th* (compare *door* and *thura*, *daughter* and *thugatĕr*); as German *s* or *z* is English *t*, so English *th* (the lisped letter instead of the hissed, the spirant for the sibilant) is Latin, Greek, and Sanskrit *t* (compare *three* and *tres*, *treis*, *tri*; *that* and *-tud*, *to*, *tad*). In short, taking the series of three dental mutes, surd, aspirate, and sonant, *t*, *th*, and *d*, we find that the Germanic languages in general, including the English, have pushed each of them forward one step, while the High-German dialects, chiefly represented by the literary German, have pushed each of them forward two steps. Thus, in tabular form:

1. *t*	S. *tad* (3),				
2. *th*	E. *that* (1),	Gr. *thura*,			
3. *d*	G. *das* (2).	E. *door*,	L. *dent-em*	(1),	
1. *t*		G. *tôr**.	E. *tooth*	(2),	
2. *th*			G. *zand**	(3).	

* I give here the Old High-German forms, as illustrating the change more distinctly and fully than the corresponding modern German words.

And a similar rule of permutation holds good also among the consonants of the two other series, the palatal and labial: *k, kh, g; p, ph, b*—the whole, with certain variations and exceptions, of which we do not need here to take account. This intricate method of correspondence without identity is generally styled, after its discoverer, "Grimm's Law of Permutation of Consonants;"* it is a fact of prime consequence in the history of the group of languages to which ours belongs, and, at the same time, one of the most remarkable and difficult phenomena of its class which the linguistic student finds anywhere offered him for explanation. Nor has any satisfactory explanation of it been yet devised; while, nevertheless, we have no reason to believe it of a nature essentially different from other mutations of sound, of equally arbitrary appearance, though of less complication and less range, which the history of language everywhere exhibits. The Armenian, for example, has converted its ancient surd mutes prevailingly into sonants, and its sonants into surds; the cockney drops his initial *h*'s, and aspirates his initial vowels: neither of these, any more than the permutation of consonants in the Germanic languages, is referable to a tendency toward ease of utterance, in any of its ordinary modes of action; yet no sound linguist would think of doubting that all the three phenomena are alike historical in their nature, results of the working out of tendencies which existed and operated in the minds of those who spoke the several languages in which they have made their appearance.

We need give but a moment's attention to another process of linguistic change, whereby not letters, parts of words, formative elements, alone are lost, but whole words, signs of ideas, disappear from among the stores of expression of a language. This, too, is always and everywhere going on. Evidence of it is to be seen in the obsolete and obsolescent material found recorded on almost every page of our dictionaries, and still more abundantly in the monuments of our literature, of periods to which our dictionaries do not pretend to go back, among the works of the earliest English writers; and, above all, in the Anglo-Saxon literature. As

* In German, simply the *Lautverschiebung*.

new thought and knowledge calls for new words and phrases, in order to its expression, so, when old thought and knowledge becomes antiquated, is superseded, and loses its currency, the words and phrases which expressed it, unless converted to other purposes, must also go out of use. It is sufficient that any constituent of language come to appear to those who have been accustomed to use it unnecessary and superfluous, and they cease to employ and transmit it; and, as tradition and use are the only means by which the life of language is kept up, it drops out of existence and disappears for ever—unless, indeed, it be maintained in artificial life by the preservation of records of the dialect in which it figured, or its mummy, with due account of its history and departed worth, be deposited, labelled "obsolete," in a dictionary. In part, things themselves pass out of notice and remembrance, and their names along with them; in part, new expressions arise, win their way to popular favour, and crowd out their predecessors; or, of two or more nearly synonymous words, one acquires a special and exclusive currency, and assumes the office of them all; in part, too, even valuable items of expression fall into desuetude, from no assignable cause save the carelessness or caprice of the language-users, and pass away, leaving a felt void behind them. Of course, those departments of a vocabulary which are liable to most extensive and rapid change by expansion are also most exposed to loss of their former substance, since the growth of human knowledge consists not merely in addition, but also in the supersession and replacement of old ideas by new: the technical phraseology of the arts, sciences, and handicrafts shows most obsolete words, as it shows most new words; yet, in the never-ending adjustment of human speech to human circumstances and needs, every part is in its own degree affected by this kind of change, as well as by the others. Rarely has any cultivated tongue, during a like period of its history, given up more of its ancient material than did the English during the few centuries which succeeded the Norman invasion; a large portion of the Anglo-Saxon vocabulary was abandoned; but this was only the natural effect of the intrusion of so many Norman-French

words, an enrichment beyond all due measure, rendering necessary the relinquishment of some part of resources which exceeded the wants of the community. If, upon the whole, we have gained by the exchange, it has not been without some regrettable losses, of the significant as well as of the formative elements of expression.

The processes which we have thus examined and illustrated —on the one hand, the production of new words and forms by the combination of old materials; on the other hand, the wearing down, wearing out, and abandonment of the words and forms thus produced, their fusion and mutilation, their destruction and oblivion—are the means by which are kept up the life and growth of language, so far as concerns its external shape and substance, its sensible body: by their joint and mutual action, greatly varying in rate and kind among different peoples, at different times, and under different circumstances, spoken tongues have been from the beginning of their history, and are still, everywhere becoming other than they were. Yet they together constitute but one department of linguistic change; another, affecting the internal content of language, the meaning of its words, equally demands notice from us. To this we have not yet distinctly directed our attention, although our illustrations have necessarily set forth, to a certain extent, its action and effects, along with those of the external modifications which we have been especially considering. It is a part of linguistic history which, to say the least, possesses not less interest and importance than the other. To trace out the changes of signification which a word has undergone is quite as essential a part of the etymologist's work as to follow back its changes of phonetic form; and the former are yet more rich in striking and unexpected developments, more full of instruction, than the latter: upon them depend in no small measure the historical results which the student of language aims at establishing. It may even be claimed with a certain justice that change and development of meaning constitute the real interior life of language, to which the other processes only furnish an outward support. In their details, indeed, the outer and inner growth are to a great extent in-

dependent of one another: a word may suffer modification of form in any degree, even to the loss or mutation of every phonetic element it once contained, with no appreciable alteration of meaning (as in our *I* for Anglo-Saxon *ic*, *eye* for *eage)*; and, again, it may be used to convey a totally different meaning from that which it formerly bore, while still maintaining its old form. Yet, upon the whole, the two must correspond, and answer one another's uses. That would be but an imperfect and awkward language, all whose expansion of significant content was made without aid from the processes which generate new words and forms; and the highest value of external change lies in its facilitation of internal, in its office of providing signs for new ideas, of expanding a vocabulary and grammatical system into a more complete adaptedness to their required uses. But change of meaning is a more fundamental and essential part of linguistic growth than change of form. If, while words grew together, became fused, integrated, abbreviated, their signification were incapable of variation, no phonetic plasticity could make of language aught but a stiff dead structure, incapable of continuously supplying the wants of a learning and reasoning people. If for every distinct conception language were compelled to provide a distinct term, if every new idea or modification of an idea called imperatively for a new word or a modification of an old one, the task of language-making would be indefinitely increased in difficulty. The case, however, is far otherwise. A wonderful facility of putting old material to new uses stands us in stead in dealing with the intent as well as the form of our words. The ideal content of speech is even more yielding than is its external audible substance to the touch of the moulding and shaping mind. In any sentence that may be chosen, as we shall find that not one of the words is uttered in the same manner as when it was first generated, so we shall also find that not one has the same meaning which belonged to it at the beginning. The phonetists claim, with truth, that any given articulated sound may, in the history of speech, pass over into any other; the same may with equal truth be claimed of the ideas signified by words: there can hardly be

two so disconnected and unlike that they may not derive themselves historically, through a succession of intermediate steps, from one another or from the same original. The varieties of significant change are as infinite as those of phonetic change; and, as in dealing with the latter, so here again, we must limit ourselves to pointing out and exemplifying the leading principles and more prominent general methods.

The fundamental fact which makes words to be of changeable meaning is the same to which we have already had to refer as making them of changeable form: namely, that there is no internal and necessary connection between a word and the idea designated by it, that no tie save a mental association binds the two together. Conventional usage, the mutual understanding of speakers and hearers, allots to each vocable its significance, and the same authority which makes is able to change, and to change as it will, in whatever way, and to whatever extent. The only limit to the power of change is that imposed by the necessity of mutual intelligibility; no word may ever by any one act be so altered as to lose its identity as a sign, becoming unrecognizable by those who have been accustomed to employ it. *Eleēmosunē* is reducible to *a'ms*, but only through a series of intermediate stages, of which the German *almosen*, the Anglo-Saxon *almes*, and our spelling *alms* are representatives; the change of significant content which it has at the same time undergone, from 'feeling of pity or compassion' to one of the practical results of such a feeling, is comparatively inconsiderable, not more than we are in the constant habit of making at a single step. Our corresponding word of Latin derivation, *charity*, while little altered in form from its original, *caritas*, 'dearness,' has suffered a much more distant transfer of signification. *Priest*, again, from the Greek *presbüteros*, 'an older person,' has wandered from its primitive to about equal distance in form and in meaning; the one departure taking place under physical inducements, brought about by an impulse to economize physical effort on the part of those who had to utter the word; the other accompanying a historical change in the character and functions of an official originally chosen

simply as a person of superior age and experience to oversee the concerns of a Christian community. These are but ordinary examples of the indefinite mutability of words, such as might be culled out of every sentence which we speak. Let us look at one or two further instances, which go back to a remoter period in the history of speech, and illustrate more fully the normal processes of word-making.

The word *moon*, with which are akin the names for the same object in many of the languages connected with our own, comes from a root *(mâ)* signifying 'to measure', and, by its etymology, means 'the measurer'. It is plainly the fact—and one of some interest, as indicating the ways of thinking of our remote ancestors—that the moon was looked upon as in a peculiar sense the measurer of time: and, indeed, we know that primitive nations generally have begun reckoning time by moons or months before arriving at a distinct apprehension of the year, as an equally natural and more important period. By an exception, the Latin name *luna* (abbreviated from *luc-na)* means 'the shining one.' In both these cases alike, we have an arbitrary restriction and special application to a single object of a term properly bearing a general sense; and also, an arbitrary selection of a single quality in a thing of complex nature to be made a ground of designation for the whole thing. In the world of created objects there are a great many "measurers", and a great many "shining ones"; there are also a great many other qualities belonging to the earth's satellite, which have just as good a right as these two to be noticed in her name: yet the appellation perfectly answers its purpose; no one, for thousands of years, has inquired, save as a matter of learned curiosity, what, after all, the word *moon* properly signifies: for us it designates our moon, and we may observe and study that luminary to the end of time without feeling that our increased knowledge furnishes any reason for our changing its name. The words for 'sun' have nearly the same history, generally designating it as 'the brilliant or shining one', or as 'the enlivener, quickener, generator'. There are hardly two other objects within the ordinary range of human observation more essentially unique than

the sun and the moon, and their titles were, as nearly as is possible in language, proper names. But such they could not continue to be. No constituent of language is the appellation of an individual existence or act; each designates a class; and, even when circumstances seem to limit the class to one member, we are ever on the watch to extend its bounds. The same tendency which, as already pointed out, leads the child, when it has learned the words *papa* and *sky*, to take the things designated by those words as types of classes, and so—rightly enough in principle, though wrongly as regards the customary use of language—to call other men *papa*, and to call the ceiling *sky*, is always active in us. Copernicus having taught us that the sun is the great centre of our system, that the earth is not the point about which and for which the rest of the universe was created, the thought is at once suggested to us that the fixed stars also may be centres of systems like our own, and we call them *suns*. And no sooner does Galileo discover for us the lesser orbs which circle about Jupiter and others of our sister-planets, than, without a scruple, or a suspicion that we are doing anything unusual or illegitimate, we style them *moons*. Each word, too, has its series of figurative and secondary meanings. "So many *suns*", "so many *moons*", signify the time marked by so many revolutions of the two luminaries respectively; in some languages the word *moon* itself (as in the Greek *mēn*), in others, a derivative from it (as the Latin *mensis* and our *month*), comes to be the usual name of the period determined by the wax and wane of our satellite—and is then transferred to designate those fixed and arbitrary subdivisions of the solar year to which the natural system of lunar months has so generally been compelled to give place. By a figure of another kind, we sometimes call by the name *sun* one who is conspicuous for brilliancy and influence: "made glorious summer by this *sun* of York." By yet another, but which has now long lost its character as a figure, and become plain and homely speech, we put *sun* for *sunlight*, saying, "to walk out of the *sun*", "to bask in the *sun*", and so on. In more learned and technical phrase, the Latin name of the moon, *lune*, or its diminutive, *lunette*, is made

the designation of various objects having a shape roughly resembling some one of the moon's varying phases. A popular superstition connects with these last some of the phenomena of insanity, and so the same word *lune* has to signify also 'a crazy fit', while a host of derivatives—as *lunatic, lunacy;* as *moon-struck, mooning, mooner*—attest in our common speech the influence of the same delusion.

This elasticity of verbal significance, this indefinite contractibility and extensibility of the meaning of words, is capable of the most varied illustration. Among all the various workmen who take rough materials and make them supple or *smooth*, the arbitrary choice of our Germanic ancestors, ages ago, designated the worker in metal as the one who should be styled the *smith*. At a much later period, when the convenience of a more developed social condition created a demand for surnames, certain individuals of this respectable profession took from it the cognomen of *Smith*. Then, just as the name *smith* had been divorced from its connection with the more general idea of *smooth*, and restricted to a certain class of smoothers, so now, the name *Smith* was cut loose from the profession, and limited to these particular individuals and their belongings. Yet, as such, it became the nucleus of a new class-extension, in which the tie of consanguinity was substituted for that of common occupation; and, although all *smiths* are not *Smiths*, the *Smiths* are now even more numerous than the *smiths*. Every proper name, not less than every common noun, goes back thus to an individual appellation, having a historical ground, and is determined in its farther application by historical circumstances. Thus, to take a more dignified example, the first Cæsar was so styled from some fact in his life—the authorities are at issue from what particular one: whether from his unnatural mode of birth *(a* CÆSO *matris utero)*, or from his coming into the world with long hair *(cæsaries)*, or from his slaying a Mauritanian elephant *(cæsar* in Mauritanian speech). His descendants then inherited from him the same name, without having to show the same reason for it; and the preëminent greatness and power of one among them made it a part of the permanent title of him who ruled the

Roman state, of whatever race he might be; while from here it not only passed to the emperor *(kaiser)* of Germany, whose throne pretends to be the modern representative of that of Rome, but also to the autocrat *(czar)* of distant and barbarous Russia—thus becoming the equivalent of 'emperor' in two of the most important languages of modern Europe.

These examples are of themselves sufficient to place before our eyes the most important features in the history of significant change of words, the principal processes by which—even apart from combination or phonetic change, but yet more effectively in connection with these—the existing vocabulary of a language is adaptable to the growing knowledge and varying needs of those who use it. We see that, in finding a name by which to designate a new conception, we may either pitch upon some one of the latter's attributes, inherent or accidental, and denominate it from that, limiting and specializing for its use an attributive term of a more general meaning; or, on the other hand, we may connect it by a tie of correspondence or analogy with some other conception already named, and extend so as to include it the sphere of application of the other's designation; while, in either case, we may improve or modify to any extent our apprehension of the object conceived of, both stripping it of qualities with which we had once invested it and attributing to it others, and may thus pave the way to the establishment of new relations between it and other objects, which shall become fruitful of further changes in our nomenclature. These two, in fact—the restriction and specialization of general terms, and the extension and generalization of special terms—are the two grand divisions under which may be arranged all the infinite varieties of the process of names-giving. Some of these varieties and their effects, however, it will be desirable for us to examine and illustrate more fully, before going on to consider farther the general character of the process. We will not attempt in our illustrations a strictly systematic method, but will take something of the same freedom which linguistic usage assumes in dealing with the material of speech.

It is obvious how vastly the resources of a language for

the expression of thought are increased by attribution to the same word of different meanings. Not only does a term exchange one well-defined meaning for another, but it acquires new uses while yet retaining those it formerly possessed. For example, *board* appears to be originally connected with *broad*, and to designate etymologically that form of timber which is especially characterized by breadth rather than thickness. Here we have the customary and normal genesis of the name of a specific thing, by restriction of a general term expressing one of its attributes. Then follow yet other individualizations and transfers. The word is applied to designate a table: on the one hand, the table upon which our food is spread, and we sit around the festive *board;* whence, then, a metaphor makes it mean provision or entertainment; and we seek bed and *board*, or work for our *board:* on the other hand, the table about which a body of men sit for the transaction of business, and so, by another metaphor, those who sit about it, a constituted body of trustees or commissioners, the Board of Trade, or of Commerce, or of Admiralty. Again, it is specifically used to denote the plank covering of a vessel, and generates in this sense a new group of phrases, like *aboard* and *overboard*. The paper-maker, too, has his technical uses for the term; to him it signifies the stiffest and thickest, the most board-like, of his fabrics. *Post* (Latin *positum*, from *pono*, 'I place') means by derivation nothing more than 'put, placed, stationed'; all its varied and diverse senses—so diverse that we can not only say "as immovable as a *post*", but also "to travel *post*-haste"—we developed out of this, along with the historical growth of human institutions. The establishment of a series of stations, *posts*, for the trusty and rapid transmission of passengers and mails along a road, leads finally to the familiar use of such terms as *post-coach*, *post-master*, and *postage*. What a cluster of derived uses is gathered about the word *head*, as illustrated in the phrases the *head* of a pin, a *head* of cabbage, the *head* of a bed, the *head* of a household or of a sect, the *head* of a river, the *heads* of a discourse, a *head* of hair, so many *head* of sheep, of one's own *head*, to come to a *head*, to make *head!* Half the whole list of figures of rhetoric are exemplified in

the history of this one word. In *court*, the secondary significations have almost effaced the primitive, and, to be clear, we say rather the *court-yard* than the *court* of a castle; but a nobleman of the *court*, a case in *court*, the *court* instructs the jury, to pay *court;* and the derivative words *courtly*, *courteous*, a *courtesy*, *courtship*, *courtier*, *courtesan*, all coming from one of the specific applications of *court*, tell us of the manners of those who walk in kings' houses.

Not seldom, the proper meaning of a word is altogether lost, and it diverges into others so unlike that the common apprehension is unable to connect them by any tie. *Become* contains *come*, but not *to be*, although we may often render it by 'come to be'. Its *be* is the same with that of *befall*, *beset*, *bemoan*, a prefix giving a transitive meaning to an intransitive verb: to *become* is originally 'to come upon, to come by, to obtain, to get'. The transfer of meaning, from 'obtain' to 'come to be', is a somewhat peculiar one; but that it is natural enough is shown by the fact that we have gone on to treat in the same way the equivalent verb *to get*, saying he *gets* tired for he *becomes* tired, and so on. From the same primitive sense of 'come upon', we have taken a step in another direction to 'sit well upon, be adapted to, suit', as when we say "such conduct does not *become* one in high station". To trace the relation between these two meanings of *become* is out of the power of most of those who use them; even the dictionaries enter them as two separate words. Not much less difficult is the connection of *kind*, 'well-disposed, friendly', with *kind*, 'a sort or species'; or of *like*, 'to be fond of', with *like*, 'resembling'—although both are but a working out, in the minds of the language-makers, of the thought "a fellow-feeling makes us wondrous kind": the idea of kindred or resemblance leading naturally to that of consideration and affection. So, once more, how *second*, 'the sixtieth of a minute', and *second* as ordinal of *two*, come to be the same word, would be a puzzle for most English speakers: the fact that *seconds* constitute the *second* order in the sexagesimal subdivision of the hour and of the degree being by no means a conspicuous one; and the act which stamped this particular second order of division with the name

second being not less arbitrary than that which applied the same term—coming, as it does, from *sequor*, 'I follow', and so signifying only 'the one next following'—to designate the ordinal which succeeded the first, rather than any other of the series.

But it is needless to multiply illustrations of this point; every one knows that it is the usual and normal character of a word to bear a variety, more or less considerable, of meanings and applications, which often diverge so widely, and are connected so loosely, that the lexicographer's art is severely taxed to trace out the tie that runs through them, and exhibit them in their natural order of development. Hardly a term that we employ is not partially ambiguous, covering, not a point, but a somewhat extended and irregular territory of significance; so that, in understanding what is said to us, we have to select, under the guidance of the context, or general requirement of the sense, the particular meaning intended. To repeat a simile already once made use of, each word is, as it were, a stroke of the pencil in an outline sketch; the *ensemble* is necessary to the correct interpretation of each. The art of clear speaking or writing consists in so making up the picture that the right meaning is surely suggested for each part, and directly suggested, without requiring any conscious process of deliberation and choice. The general ambiguity of speech is contended against and sought to be overcome in the technical vocabulary of every art and science: in chemistry, for instance, in mineralogy, in botany, by the observation of minor differences, even back to the ultimate atomic constitution of things, and by the multiplication and nice distinction of terms, the classes under which common speech groups together the objects of common life are broken up, and each substance and quality is noted by a name which designates it, and it alone. Mental philosophy attempts the same thing with regard to the processes and cognitions of the mind; but since, in matters of subjective apprehension, it is impracticable to bring the meaning of words to a definite and unmistakable test, the difficulty of distinctly denominating one's ideas, of defining terms, amounts to an impossibility: no two schools of metaphysics, no two teachers even, agree pre-

cisely in their phraseology; nor can any one's doctrine upon recondite points be fully understood save by those who have studied longest and most thoroughly the entirety of his system—nor always even by them.

As the significant changes of language thus bring the same word to the office of designating things widely different, so they also bring different words to the office of designating the same or nearly the same thing. Thus the resources of expression are enriched in another way, by the production of synonyms, names partly accordant, partly otherwise, distinguishing different shades and aspects of the same general idea. I will refer to but a single instance. The feeling of shrinking anticipation of imminent danger, in its most general manifestation, is called *fear*: but for various degrees and manifestations of *fear* we have also the names *fright*, *terror*, *dread*, *alarm*, *apprehension*, *panic*, *tremor*, *timidity*, *fearfulness*, and perhaps others. Each of these has its own relations and associations; there is hardly a case where any one of them is employed that one or other of the rest might not be put in its place; and yet, there are also situations where only one of them is the best term to use—though the selection can only be made, or appreciated when made, by those who are nicest in their treatment of language, and though no one who does not possess unusual acuteness and critical judgment can duly describe and illustrate the special significance of each term. We are not to suppose, however, that our synonymy covers all the distinctions, in this or in any other case, that might be drawn, and drawn advantageously. On learning another language, we may find in its vocabulary a richer store of expressions for the varieties of this emotion, or a notation of certain forms of it which we do not heed. Hardly any word in one tongue precisely fills the domain appropriated to the word most nearly corresponding with it in another, so that the former may be invariably translated by the latter. The same territory of significance is differently parcelled out in different tongues among the designations which occupy it; nor is it ever completely covered by them all. The varying shades of *fear* are practically infinite, depending on differences of constitutional impressi-

bility to such a feeling, on differences of character and habit which would make it lead to different action. Hence the impossibility that one should ever apprehend with absolute truth what another, even with the nicest use of language, endeavours to communicate to him. This incapacity of speech to reveal all that the mind contains meets us at every point. The soul of each man is a mystery which no other man can fathom: the most perfect system of signs, the most richly developed language, leads only to a partial comprehension, a mutual intelligence whose degree of completeness depends upon the nature of the subject treated, and the acquaintance of the hearer with the mental and moral character of the speaker.

It not infrequently happens that a variation of phonetic form comes in to aid the variation of significant content of a word. That *minúte* portion of time of which sixty make an hour we call *mínute* (*mín-it*). *Of* and *off* are but different English forms of the same Anglo-Saxon word, the latter retaining the full significance of the ancient preposition, the former having acquired a greatly attenuated and extended sense. *Can* is a variety of *ken*, 'to know,' and means etymologically 'to know how;' the language-makers had observed that "knowledge is power" long before it occurred to Lord Bacon to make the remark. *Worked* and *wrought*, *owned*, *owed*, and *ought*, are identical in all their constituent elements, however differently understood and employed by us. A yet more notable diversity, both of form and meaning, has been established between *also* and *as*. *Gentle*, *genteel*, and *gentile* all go back to the Latin *gentilis*, which means simply 'pertaining to a *gens* or race.' So with *legal*, *loyal*, and *leal*, so with *fragile* and *frail*, with *secure* and *sure* —of which the former come more directly from the Latin, the other from the corrupted French forms. So, too, with *manœuvre* and *manure*, *corps* and *corpse*, *think* and *thank*, and a host of other words which might readily be adduced.

Among the examples already given, not a few have illustrated the transfer of a word from a physical to a spiritual significance. This method of change is one of such prominent importance in the development of language that it

requires at our hands a more special treatment. By it has been generated the whole body of our intellectual, moral, and abstract vocabulary; every word and phrase of which this is composed, if we are able to trace its history back to the beginning, can be shown to have signified originally something concrete and apprehensible by the senses; its present use is the result of a figurative transfer, founded on the recognition of an analogy between a physical and a mental act or product. Let us look, for example, at a few of the terms which we have just been using. *Abstract* is 'drawn off, dragged away;' *concrete* is 'grown together, compacted,' into something *substantial*, as we say; that is, something that 'stands beneath,' constitutes a foundation. *Spirit* is 'breath.' *Intellect* comes from a verb signifying 'to gather or select among, to choose between.' *Apprehend* signifies literally 'to lay hold of,' and we still use it in that sense, as when we say that the officer *apprehends* the felon; but we much more often apply it to the laying hold, the seizing or catching, of something set before our minds to be received; and we even speak of an *apprehended* calamity, as if our anticipations reached out and laid hold upon that which has not yet come, and may never come, upon us. *Sympathy* is good Greek for 'companionship in suffering;' but if we say that two wounded men on neighbouring pallets *sympathize*, we refer, not to their physical distress, but to that unselfish emotional pain with which every noble heart, forgetting so far its own griefs, is touched at the sight of another's. To *possess* is 'to sit by, to beset' (like the German equivalent, *besitzen*). When we employ the phrase "I propose to discuss an important subject," of what a medley of metaphors should we be guilty, if we had not forgotten the etymological meaning of the terms we use! To *propose* is 'to set in front' of us; to *discuss* is 'to shake to pieces;' a *subject* is a thing 'thrown under,' something brought under our notice; *important* means 'carrying within'—that is, having a content, not empty or valueless.

This subject admits of easiest and most abundant illustration from the Latin side of our language, because so large a share of our abstract phraseology comes to us from Latin

sources; yet our Germanic words are full of the same kind of meaning. One of our commonest intellectual terms, *understand*, is also one presenting an exceptionally bold and difficult figure: as if to 'stand beneath' (or perhaps, according to the older meaning of *under*, to 'stand in the midst of') a thing were to take such a position of advantage with regard to it that it could not help disclosing to us its secrets. *Forget* is the opposite of *get*, and means to 'fail to get,' or, having gotten, to lose again from possession. In this latter sense the language seizes upon it, but arbitrarily restricts its application to a mental possession, and makes the compound signify 'to lose from memory' only. I *get* my lesson, and *forget* it again; but the fortune I had once *gotten* I have by no means *forgotten*, when an unlucky venture has made it slip from my hands. *Forgive* has had a somewhat similar history. It signifies primarily to 'give up.' I *forgive* a debt (in phrase now antiquated) when I magnanimously yield it up to him by whom it is due, waiving my claim against him on account of it: I *forgive* an offence when in like manner I voluntarily release the offender from obligation to make amends, from liability to penalty, for it. It is only by what was originally a blunder of construction that we now talk of *forgiving* the offender, as well as the offence —a blunder like that which we have made in the treatment of more than one other word: for instance, in *please* and *like;* we said "if you *please*," "if you *like*," i. e. 'if it *please* you,' 'if it *like* you,' until we forgot that the *you* was object of the verb used impersonally, and, apprehending it as subject, began to say also "if I please," "if they like;" and again, in *reproach*, which means strictly to 'approach again,' to bring up anew before a person what he would fain forget, and, until its etymology was forgotten, took for direct object the offence, and for indirect the offender; as, "I *reproached* to my friend his fault." *Befall* is 'fall upon;' but, if some unlucky person is crushed under the ruins of his dwelling, we speak, not of the house, but only of the accident, as having *befallen* him. *Right* is 'straight, direct;' *wrong* is 'wrung, twisted;' *queer* is 'crosswise'—and so on, through the whole list of words of the same kind.

There is a large and important class of words, the history of whose development of meaning illustrates, not so much an elimination of the physical element, a transfer from a sensible to an intellectual use, as an effacement of significance, a fading-out of distinctive colour, a withdrawal of substantiality, a reduction to the expression of relation rather than of quality. Take as an instance the preposition *of*, already referred to as having been, not long since, undistinguished from *off*, in either form or meaning. *Off* still retains its distinct physical sense, of removal in place; it means 'from, away from, forth from;' in *of*, we have attenuated this original idea of removal, procedure, derivation, into the most general and indefinite one of possession, appurtenance, connection: we say the top *of* the mountain, though the former is not *off*, but *on*, the latter; we say the father *of* the boy, as well as the son *of* the man; we say a sword *of* steel, pride *of* birth, the time *of* Moses, the city *of* Athens, and so on. *For*, from *fore*, 'in front of,' has passed through a process closely similar. *Also* (A.-S. *eal-swa*) was made up of *all* and *so*, and meant 'altogether thus, in just that way, in like wise;' now, like the abbreviated form of the last expression, *likewise*, it simply adds a circumstance coördinate with one already mentioned; it is hardly more than a particle of connection. *As*, as was pointed out above, is a mutilated form of the same word, with its demonstrative meaning usually converted into a relative: the act of apprehension which, in a phrase like "he is *as* good *as* he is great" (that is, 'he is in that degree or manner good in which degree he is great'), attributes a demonstrative sense to the former *as*, and a relative to the latter, is not less arbitrary than the one which attributes, in "*the* more, *the* merrier" (that is, 'in what degree more, in that degree merrier'), a relative sense to the former *the*, and a demonstrative to the latter. All those relative words which bind the parts of a sentence together into an organic whole, instead of leaving it a congeries of independent clauses, are of like origin, coming by a gradual change of meaning from words originally demonstrative or interrogative. "I knew *that* he was ill" is but an altered form of "he was ill; I

knew *that*," or "I knew *that* thing: viz. he was ill;" "we saw the man *who* did it" represents "*who* did it? we saw the man," or "we saw the man [of whom the inquiry is made] *who* did it?" *Than* is historically the same word as *then*: "he is mightier *than* I" was once "he is mightier, *then* (that is, next after him) I." *Or* is a contracted form of *other*. The primary meaning of *and* is 'against;' the simpler form of the latter, *again*, has made at least partially the same transition to a connective. Our articles are of quite modern development; *an* or *a* is the numeral *one*; *the* is the demonstrative *that*. We saw some time since how *head* has come to stand for 'individual;' the butcher talks of "twenty *head* of sheep," as if that part of the animal were not the least valuable from his point of view. *Hand* is similarly applied: "the head-carpenter and his twenty *hands*," if it do not describe one Briarean individual, ought at least to designate only eleven persons; but in our usage it denotes twenty-one. Even the peculiarly corporal word *body* has been spiritualized, in *somebody*, *anybody*, "if a *body* meet a *body*," and so on: to say "*nobody* was present" is equivalent to saying "not a soul was there," and would be true, however many corpses, or beasts, or bodies metallic, fluid, or aëriform, might have been within cognizance. The verb *grow* signifies properly 'to increase, to change from smaller to larger,' but we often use it in the simple sense of gradual change, of 'becoming,' and say to *grow* thin or small, to *grow* tired. By a farther extension of the same process, the verb which in our whole family of languages originally meant 'to grow' (Sansk. *bhû*, Greek *phüō*) has in many of them passed through the idea of 'becoming' to that of 'being' simply: the Latin *fui*, our *be*, *been*, are its descendants. Indeed, our substantive verb *to be*, the most bodiless and colourless of all our words, the mere copula between subject and predicate, is made up of the relics of several verbs which once had a distinct physical significance: *be* and *been*, as just noticed, contained the idea of 'growing;' *am*, *art*, *is*, and *are*, that of 'sitting;'* *was* and *were*, that of 'dwelling, abiding.'

* I connect, namely, the root *as* with *âs*, 'sitting,' as being most probably a different form of the same original. Others conjecture the primitive signification to have been that of 'breathing.'

The corresponding verb in modern French is partly filled up (*être, étais, été*) from the Latin *stare*, 'to stand.'

Not only are certain words thus stripped by the users and makers of language of the substantial meaning with which they once were invested, but phrases are also formed, of two or more words, and applied to uses widely remote from those which their constituents more generally and properly subserve. An event, we say, *takes place*, or *comes to pass*; a young man *turns out* ill; his foibles are tellingly *hit off*, or *taken off*; though they had seriously *fallen out*, they *made up* their quarrel, and a good understanding was *brought about* between them; they *gave up* further attempts; at every new turn, he was *headed off* anew; I was *put up* to it, but woefully *put upon*, and shall *put up with* such treatment no longer; don't *take on* so, my good fellow—and so on indefinitely. Phrases such as these are abundant in every part of language, and are of every kind and degree of removal from literalness: in some, a moment's reflection points out the figure or the implication which has led the way to their establishment in current use; in others, the transfer has been so distant, and some of its steps so bold or so obscure, that even a careful investigation fails fully to show us how it has been accomplished. In phrases, as is well known, consists no small part of the idiom of a language; use determines, not merely the significance which each word shall bear, but how it shall be combined with other words, in order to something more than intelligibility—to expressiveness, to force, to elegance of style.

All word-making by combination, as illustrated in the last lecture, is closely analogous with phrase-making: it is but the external and formal unification of elements which usage has already made one in idea. The separate and distinctive meaning of the two words in *take place* is as wholly ignored by us who use the expression as is that of the two in *breakfast*; that we may allow ourselves to say *he breakfasted*, but not *it takeplaced*, is only an accident; it has no deeper ground than the arbitrariness of conventional usage. To *hit off* is as much one idea as *doff* (from *do off*), to *take on* as *don* (from *do on*), although we are not likely ever to fuse the

two former into single words, like the two latter. It is clear that, as formerly claimed, the significant content of words is more plastic than their external form: while our language has nearly lost the habit, and so the "power," as we call it, of making new vocables out of independent elements, it is still able to combine and integrate the meanings of such elements, to no small extent.

But again, all form-making includes as an essential part something of the same attenuation of meaning of the formative element, the same withdrawal of its distinctive substantial significance and substitution of one which is relational and formal, which we have been illustrating in the history of independent words. The *ly* of *godly*, *homely*, *lively*, and so on, no longer means 'like;' still less does that of *fully*, *mostly*, etc. In the *ship* of *lordship*, the independent word *shape* is no more to be recognized by its significance than by its form. Even the *ful* of *healthful* and *cheerful* has been weakened in intent from 'full of' to 'possessed of, characterized by.' But there are other phrases which exhibit a closer resemblance and more intimate connection with form-making than any hitherto cited. The *d* of *loved*, as we have already seen, is by origin the imperfect *did; I loved* means etymologically 'I did or performed a loving;' the *d* has been converted from an independent word into a formative element, indicative of past action, by being compounded with *love*, and then, in the relation which it sustained toward that word, losing its distinctive force and meaning, and assuming the value of a temporal modification merely. With the form *I loved*, now, the phrase *I did love* is virtually equivalent: it contains the same elements, and they have the same logical value: the *did* is there for no other purpose than the *d*, its hereditary representative, and is in idea, not less than the latter, a formative element; it impresses a modification of temporal form upon the word with which it is connected, and has no other office. That it still maintains its grammatical standing as a separate word constitutes only a formal, not an essential, distinction between the two equivalent expressions. So also with the verb *have*, by the aid of which we form other of

our past tenses, and of which the primitive significance is 'possession.' It is easy to see how "I *have* my arms stretched out" might pass into "I *have* stretched out my arms," or how, in such phrases as "he *has* put on his coat," "we *have* eaten our breakfast," "they *have* finished their work," a declaration of possession of the object in the condition denoted by the participle should come to be accepted as sufficiently expressing the completed act of putting it into that condition; the present possession, in fact, implies the past action, and, if our use of *have* were limited to the cases in which such an implication was apparent, the expressions in which we used it would be phrases only. When, however, we extend the implication of past action to every variety of case—as in "I *have* discharged my servant," "he *has* lost his breakfast," "we *have* exposed their errors," where there is no idea of possession for it to grow out of; or with neuter verbs, "you *have* been in error," "he *has* come from London," "they *have* gone away," where there is even no object for the *have* to govern, where condition, and not action, is expressed, and "you *are* been," "he *is* come," "they *are* gone" would be theoretically more correct (as they are alone proper in German)—then we have converted *have* from an independent part of speech into a purely formative element. The same word, by a usage not less bold and pregnant, though of less frequent occurrence, we make to signify causation of action, as in the phrases "I will *have* him well whipped for his impertinence," "he *has* his servant wake him every morning." And, yet once more, we turn it into a sign of future action, with further implication of necessity, as in "I *have* to go to him directly." As is well known, the modern European languages which are descended from the Latin have formed their simple futures by means of this phrase, eliminating from it the implication of necessity: the French *j'aimerai*, 'I shall love,' for instance, is by origin *je aimer ai*, i.e. *j'ai à aimer*, 'I have to love.' Nor is our own "I *shall* love" of different history, for I *shall* means properly 'I owe, am under obligation;' and the *will* of "he *will* love," although we now so commonly employ it as the mere sign of futurity, conveys

the idea of 'wish, intent, determination.' The Anglo-Saxon had no future tense, but habitually employed its present in the sense of both present and future; we have struck out, in our modern usage, a peculiarly rich synonymy of expressions for future action: there are the two already mentioned, I *will* go, and I *shall* go, each of which is capable of use as simple future, or with a modal implication; further, I *have* to go, with the nearly equivalent I *am* to go; I *am going* to go (to which the French adds the closely correlative expression "I am coming from going," *je viens d'aller*, that is, 'I have just gone'); I *am on the point* of going, and I *am about* to go—with which is nearly allied the Hibernicism, I *am after* going, for 'I have gone.' These phrases will illustrate the ease with which are found, in the resources of a rich and flexible language, means of denoting a given relation, the variety in which they may be produced, and the arbitrariness with which certain ones are selected for most frequent and familiar employment.

An instance of a purely formal word of a different character is furnished us in the preposition *to* as "sign of the infinitive." The infinitive is originally and properly the verbal noun, and, as a noun, should be governed by any preposition which the sense may require. The present usage of our language, however, forbids this freedom of construction, and assigns to the infinitive *to* as its almost constant accompaniment. At first, the *to* was only employed where it had its proper significance, as in phrases like "I am here *to* help him," that is, 'in order *to* the helping him,' "lawful for him *to* eat," that is, '*to* the eating;'* now, no regard whatever is had to this consideration, and, to the apprehension of every speaker of English, *to* is as arbitrary and non-significant a sign of this form of the verb as is the ending *en* of the German *essen*, or *re* of the Latin *edere*.

Yet another class of words having the grammatical *status* of independent members of the sentence, but the logical

* In Anglo-Saxon, *him alyfede to etanne*, 'allowed him unto eating,' the Anglo-Saxon putting the infinitive after *to* into a distinct dative case, but leaving it uninflected when the object of a verb; as in *hi onjunnon etan*, 'they began eating.'

value of formative elements, is exemplified in the preposition *of*, as already noticed. The *of* in "a crown *of* gold" is equivalent to the adjective suffix *en* in "a golden crown;" that in "the son *of* the king" to the genitive ending *s* in "the king's son."

We have paid the more attention to this kind of words, because of their importance in the history of language. Such shadowy and half-formal parts of speech as *an* and *the*, such *quasi* formative elements as *do* and *have*, as *to* and *of*, are products of the development of language which by their prevalence mark a distinct tendency, known as the "analytical," and characteristic, in a greater or less degree, of many of the modern tongues with which ours is related. We shall have to take it into further account in connection with another department of our subject (see lecture seventh).

Let us now look at a single example going to show to what a rich variety the processes of development of meaning may lead among the derivatives of a single verb. *Pono*, in Latin, signifies 'put,' or 'place,' but we might well spend an hour in tracing out all the store of ideas which it has been made in our language the means of designating. Some of its uses we have inherited from the Latin; others were struck out during the later period of the French; yet others have grown up on English soil; and we are even now far from having exhausted its capabilities of expression. From the uncompounded root come *pose*, a *poser*, *position*, with its many applications, *post*, with its still more various and special uses, *posture*, *positive*, and so forth. Then, as combined with prefixes, for the most part significant merely of place and direction, it gives us an *apposite* remark; *apposition* of nouns; *component* parts; *composure* of mind; a great *composer*; *compositions* and declamations; a *composing*-stick; *compost*-heaps; *compound* interest; to *compound* a felony; a *deponent* verb; the *deponent* saith; a *deposed* king; *depositions* from water; a school-book *depository*; removal of the *deposits*; a railway *depot*; an *exponent* of democratic principles; to *expose* a fraud; *exposed* to attack; clear *exposition* of a hard text; a lawn with southern *exposure*; an *imposing* figure; *imposts* and customs; miserable *impostor*; consecrated

by *imposition* of hands; to *impound* stray cattle; an *imposing*-stone; all his *disposable* forces; *disposed* to sleep; an amiable *disposition;* the prima donna is *indisposed;* troops *disposed* in three lines; God *disposes;* a worthy *opponent;* the house *opposite;* member of the *opposition;* divine *interposition;* he *proposed* to her; fifth *proposition,* first book; *propounded* for admission; locked in sweet *repose;* to *repose* confidence; what do you *purpose?* he did it on *purpose;* an effect *supposes* a cause; at least, I *suppose* so; a *supposititious* heir; and so on. Here is but a selection from among the multitude of expressions for heterogeneous conceptions which have grown out of the sign for the simple idea of 'putting' or 'placing;' but, though a striking, they are not an exceptional instance of the manner in which linguistic usage deals with all the material of language. As new experiences are met with, new deductions drawn, new opinions formed, new mental combinations made, new products brought forth, new existences discovered, language finds no difficulty in enlarging itself to represent them. The material which lies most conveniently at hand, even if it be not very near, is seized and applied to the purpose: that which was general is individualized; that which was individual is generalized; the concrete becomes the abstract; every variety of metaphor, of elliptical and pregnant expression, is resorted to, and, however bold and even startling at first, sinks by degrees to the level of ordinary prosaic appellation; and delicate shades of meaning are distinguished by the gradual separation of words at first equivalent. The multiplicity of these changes, and the variety of their results, our examples have been wholly inadequate to set forth with any fulness or completeness; only enough has been said to bring to light the leading facts and principles, to show what a fertile power of modification and adaptation is inherent in our speech, and that, in seeking and finding names for individual objects of conception, it is restrained within no narrow limits of action.

It must not fail to be observed that these processes of word-making, of names-giving, in all their variety, are not, in the fullest sense, consciously performed: that is to say, they are not, for the most part, premeditated and reflective.

There may be found among them, indeed, every degree of reflection, sometimes rising even to full premeditation. When there is first brought to the knowledge of a community some new substance or product, either natural or artificial, some result of invention or discovery, some process formerly unknown, people ask themselves deliberately "what shall we call it?" and it is by a conscious effort that they devise and assign its appellation—there being, at the same time, an unconscious part to the process; namely, the manner in which their selection is guided and determined by the already subsisting usages and analogies of their speech, and by the limitations of their intelligence. The zoölogist, the chemist, the geologist, when they want a new technical term or distinctive name, go of set purpose to such sources as their Greek and Latin dictionaries, or search out local or personal associations upon which to found their choice; they con over the various distinctive qualities or accidental circumstances of the thing to be denominated, and weigh the capabilities and advisabilities of the case as deliberately as does the father when deciding after which rich uncle, or what noted public character, he shall have his son christened. Sometimes the scientific man has put upon him the task of devising a terminology, as well as a nomenclature—as was the case with those French chemists, at the end of the last century, who fixed the precise scientific meaning to be thenceforth signified by a whole apparatus of formative elements, of suffixes and prefixes: for example, in *sulphuret, sulphuric, sulphurous, sulphate, sulphite, sulphide, bisulphate, sesquisulphide,* and so on. This is, indeed, of the nature of an artificial universal language, built up of precise, sharply distinguished, and invariably regular signs for the relations of ideas—such a language as some have vainly imagined it possible to invent and teach for all the infinitely varied needs of speech, and for the use of the whole human race: the chemical terminology is, in its own sphere, of universal applicability, and is adopted by chemists of various race and native tongue. But human language is not made in this way. The most important and intimate part of linguistic growth, that which

affects the vocabulary of general and daily use, learned by every child, used in the common intercourse of life, goes on in a covert and unacknowledged manner; it is almost insensibly slow in its progress; it is the effect of a gradual accumulation of knowledge and quickening of insight; it is wrought out, as it were, item by item, from the mass of the already subsisting resources of expression: the mind, familiar with a certain use of a term, sees and improves a possibility of its extension, or modification, or nicer definition; old ideas, long put side by side and compared, prompt a new one; deductions hitherto unperceived are drawn from premises already known; a distinction is sharpened; a conception is invested with novel associations; experience suggests a new complex of ideas as calling for conjoint expression. Speech is the work of the mind coming to a clearer consciousness of its own conceptions and of their combinations and relations, and is at the same time the means by which that clearer consciousness is attained; and hence, it works its own progress; its use teaches its improvement; practice in the manipulation of ideas as represented by words leads the way to their more adroit and effective management. A vocabulary, even while undergoing no extension in substantial content of words and forms, may grow indefinitely in expressiveness, becoming filled up with new senses, its words and phrases made pregnant with deeper and more varied significance. It may do so, and it will, if there lie in the nature and circumstances of the people who speak it a capacity for such growth. The speech of a community is the reflex of its average and collective capacity, because, as we have already seen, the community alone is able to make and change language; nothing can become a part of the common treasure of expression which is not generally apprehended, approved, and accepted. It is not true, as is sometimes taught or implied, that a genius or commanding intellect, arising among a people, can impress a marked effect upon its language—least of all, in the earlier stages of linguistic development, or amid ruder and more primitive conditions of culture. No individual can affect speech directly except by separate items of change in respect

to which he sets an example for others to follow, and an example which will be followed in proportion as the changes are accordant with already prevailing usage and naturally suggested by it: the general structure and character of language are out of his reach, save as he can raise the common intellect, and quicken and fertilize the minds of his fellows, thus sowing seed which may spring up and bear fruit in language also. If he attempt anything like innovation, the conservatism of the community will array itself against him with a force of resistance against which he will be powerless. The commanding intellect has much the better opportunity to act effectively in a cultivated and lettered people, inasmuch as his inciting and lifting influence can be immediately exerted upon so many more of his fellows, and even upon more than one generation.

Especially is it true that all form-making is accomplished by a gradual and unreflective process. It is impossible to suppose, for instance, that, in converting the adjective *like* into the adverbial suffix *ly*, there was anything like intention or premeditation, any looking forward, even, to the final result. One step simply prepared the way for and led to another. We can trace the successive stages of the transfer, but we cannot see the historical conditions and linguistic habits which facilitated it, or tell why, among all the Germanic races, the English alone should have given the suffix this peculiar application; why the others content themselves without any distinctive adverbial suffix, nor feel that their modes of expressing the adverbial relation are less clear and forcible than ours. And so in every other like case. An aptitude in handling the elements of speech, a capacity to perceive how the resources of expression can be applied to formative uses, a tendency toward the distinct indication of formal relations rather than their implication merely—these, in their natural and unconscious workings, constitute the force which produces grammatical forms, which builds up, piece by piece, a grammatical system, more or less full and complete. Every language is the product and expression of the capacities and tendencies of a race as bearing upon the specific work of language-making; it illustrates

what they could do in this particular walk of human effort; and the variety of product shows the difference of human endowment in this regard, even more strikingly than the variety of the art-products of different peoples exhibits their diverse grade and kind of artistic power to conceive and execute.

For, as has been already pointed out, and must here again be insisted on, every single act in the whole process of making words and forming language, at every period of linguistic development, has been a human act. Whether more or less deliberately performed, it was always essentially of the same kind; it was something brought about by the free action of men. Its reasons lay in human circumstances, were felt in human minds, and prompted human organs to effort. No name was ever given save as a man or men apprehended some conception as calling for expression, and expressed it. Every idea had its distinct existence before it received its distinctive sign; the thought is anterior to the language by which it is represented. To maintain the opposite, to hold that the sign exists before the thing signified, or that a conception cannot be entertained without the support of a word, would be the sheerest folly; it would compel us to assert that *galvanism* could not be recognized as a new form of natural force, hitherto undescribed, until its discoverers had decided what to style it; that Neptune was not visible in the astronomer's glass till it had been determined after which of the Grecian divinities it should be christened; that the spinner's *mule* and *jenny* were not built till the inventor had chosen a name for them; that the aniline colours made upon the eye no impressions distinguishable from those of hues long familiar until the battle-fields had been pitched upon whose names they should bear; that the community had no appreciation of the frequent tediousness and impertinence of official forms until they had agreed to call it *red tape;* that the human race did not see that the colour of growing things like leaves and grass was different from those of the clear sky, of blood, of earth, of snow, until, from the name for *growing*, they had worked out for it a name *green*, as well as, by some similar process, like names for the

others. Men do not lay up in store a list of ideas, to be provided with spoken signs when some convenient season shall come; nor do they prepare a catalogue of words, to which ideas shall be attached when found: when the thing is perceived, the idea conceived, they find in the existing resources of speech the means of its expression—a name which formerly belonged to something else in some way akin with it; a combination of words, a phrase, which perhaps remains a phrase, perhaps is fused into, or replaced by, a single word. Thus, for example, men were proposed in ancient Rome for the free suffrages of their fellow-citizens, and were, without difficulty, variously described as such, before any distinctive appellation for one in such a plight had been established; but the fortuitous circumstance that Roman usage required those who were openly seeking office to be *candidatos*, 'dressed in *white* (*candidus*),' led by degrees to their designation, pregnantly, as *candidati;* and now, through nearly the whole civilized world, he who aspires to election or selection to any place or station is styled a *candidate.*

Thus it is that the reason why anything is called as we are accustomed to call it is a historical reason; it amounts to this: that, at some time in the past—either when the thing was first apprehended, or at some later period—it was convenient for men to apply to it this name. And the principal item in this convenience was, that certain other things were already named so and so. Until we arrive at the very beginnings of speech (the character and origin of which must be reserved for discussion at a later period of these lectures), every name comes, by combination, derivation, or simple transfer of meaning, from some other name or names: men do not create new words out of hand; they construct them of old material. At the time and under the circumstances, then, when each term acquired its given significance, the possession of certain other resources of expression, combined with certain usages of speech and habits of thought, and influenced by external circumstances, caused men's choice to fall upon it rather than upon any other combination of sounds. Thus every word has its etymology or derivation,

and to trace out its etymology is to follow up and exhibit its transfers of meaning and changes of form, as far back and as completely as the nature of the case allows. To recur to our last example—*cândidate* is the modern abbreviated form of *candidatus*, participle of the (implied) Latin derivative verb *candidare*, 'to whiten,' from *candidus*, 'white;' and the historical circumstance which suggested its selection and application to its purpose has been pointed out. *Candidus* is itself a derivative adjective, coming from the verb *candeo*, which means 'to shimmer, to shine;' it designates properly a glittering or sheeny white. We have this also in our language, little altered in form, as the word *candid;* but, though it may be found here and there in old authors employed in its sensible, physical signification of 'white,' it has in our ordinary use been transferred, by a figure of which every one appreciates the naturalness, to indicate a mental quality, freedom from bias or prejudice, from dissimulation, from deceit—those dark shades and spots on a character. Few of us ever think of a connection of idea between *candid* and *candidate;* and the less, as the position indicated by the latter word is by no means favourable to the development of the virtue expressed by the former. The verb *candeo* we are able to trace one or two steps farther back, through *caneo* and *canus*, to a root *can*, which signifies 'shining;' this, to our analysis, is an ultimate fact, beyond which we cannot at present penetrate.

But, while words thus have their historical grounds, while the etymologist can explain how they came to receive the value which we attribute to them, we must beware of ascribing too cogent or too permanent a force to the etymological reason. It was not a necessary reason; there was no element of compulsion in it. The Roman seeker for office might just as well have gotten some such name as *proponent*, 'proposer,' or *petent*, 'seeker,' as the one by which he actually came to be called; either of these, it may be claimed, is more truly significant than *candidate*, which expresses only a fortuitous circumstance of external garb, and was applicable to any one who should choose to wear a white dress. All that can be said in reply is that the Romans were in fact

guided by the fortuitous rather than the more significant circumstance to their selection of a name. So, also, the Latin word *albus* or the Germanic word *white* might have been not less readily than *candidus* applied to designate the possession of candour; only the language-makers, for reasons which they themselves could not have explained, willed it otherwise. Among the various metaphors by which such a quality was signifiable and from time to time signified, this chanced to be the one which established itself in frequent use, and of which the metaphorical origin was by degrees forgotten. From among many possible expedients, it was the one pitched upon for filling this special need, for increasing in this direction the resources of expression. And then, when the expedient is once found, when the name is accepted by the community and installed in its office, the etymological reason becomes no longer operative; the sole and sufficient authority for the use of the term is the common assent and custom. Individuals do not go on indefinitely to repeat the act of transfer which first allotted a word to its use; they establish a direct mental association between the idea and the sign, and depend upon that. As was pointed out in the first lecture (p. 14), the child does not concern himself with questions of etymology when learning to talk; the words which he acquires he receives and employs implicitly, for the sole reason that those about him employ them. As he grows older, he will, in varying degree, according to his turn of mind, his general culture, and his particular education, turn his attention to etymological inquiries, and please himself with tracing out why the words which he has learned or learns were elected to the office in which they serve him. But it is always a matter of reflection, of learned curiosity; it concerns, not the general users of speech, but him who would study its history. To the greatest etymologist who lives, not less than to the most ignorant and unreflective speaker, the reason why he calls a certain idea by a certain name is simply that the community in which he lives so call it, and will understand him when he does the same. It is quite worth while to know how *candidate* and *candid* came to mean as they do; but our knowledge or our ignorance of their

etymology does not determine our use and understanding of the terms. It is, no doubt, an interesting and valuable bit of information for the physicist that *galvanism* was named after its first discoverer; the fact is one of which no student, no well-informed man even, should be ignorant; but one may use the word *galvanism* as well for all practical purposes without ever having heard of Galvani; and thousands do it every day. How few of those who talk about *electricity* are aware that it signifies by derivation 'the quality of being like *amber* (Greek, *elektron*),' and has no better ground than the accidental circumstance that the first recognized manifestation of this potent force was the power of attracting light objects exhibited by a piece of amber when rubbed? And as to the etymological reason of *elektron* itself, as Greek designation of 'amber,' it is irrecoverably lost. It is, however, far from being at our option to declare the etymology of *electricity* a paltry and insufficient one, and to resolve that we will have a name which shall denote some more essential quality of the force, and of which we can trace the history back to the very beginning; he would be laughed at for a fool who should attempt such a revolution; a designation in the use of which the community are agreed is good enough for any one: it requires no other sanction. If the case were otherwise, if the right to use a word depended in any manner on its etymology, then every human being would have to be an etymologist, prepared to render a reason, when called upon, for everything he utters. But, in fact, only the most skilled and practised student of his native tongue can explain the history of any considerable part of its vocabulary; and even his researches are apt to carry him back through no more than the latest stages of its growth: the ultimate facts are out of his reach.

We study, then, the history of words, not in order to assure ourselves of our right to employ them as we do, but to satisfy a natural curiosity respecting the familiar and indispensable means of our daily intercourse, and to learn something of the circumstances and character of those who established them in use. It is because every act of word-making is a historical act, the work of human minds under the guidance

of human circumstances, that the investigation of language is an inquiry into the internal and external history of men. The results of such investigation are of the most varied character. Sometimes we find at the basis of a word a mere blunder of philosophy, as when we talk about *lunatics*, as if we still believed the aberration of their wits to depend upon the devious motions of the moon (*luna*); or a blunder of natural history, as when we call our own native American feathered biped a *turkey*, in servile imitation of that ill-informed generation of Englishmen, which, not knowing whence he came, but surmising that it might probably enough be Turkey, dubbed him "the Turkey fowl;" or a blunder of geography, as when we style our aborigines *Indians*, because the early discoverers of this continent set their faces westward from Europe to find India, and thought at first that they had found it. *Copper*, the *magnet*, *parchment* commemorate for us the countries Cyprus, Magnesia, and Pergamos, whence those substances were first brought to the founders of our civilization. *Manumit*, like *candidate*, owes its existence to a peculiar Roman custom—of dismissing, namely, with a slap of the hand a slave made free. *Money* and *mint* (two different forms of the same original, *monetà*, the one coming from the French *monnaie*, the other from the Anglo-Saxon *mynet*) tell of Roman superstition and Roman convenience: within the imperial city was raised a temple to Juno *Moneta*, 'Juno the *Monisher*,' in recognition of the supernatural *monitions* the goddess had given them in certain crises of their history; and in this temple, as it chanced, was set up the first stamp and die for coining money. We say *calculate*, because the early Romans reckoned by the aid of little pebbles (*calculi*). We call a truckling and unscrupulous parasite a *sycophant*, because it once pleased the men of Athens to pass a law forbidding the exportation of figs from Attica; which, as is apt to be the case with such laws, was little more than a dead letter; while yet there were found in the community certain mean fellows who sought to gain their selfish ends by blabbing, or threatening to blab, of those who violated it (*sŭko-phantĭs*, 'fig-blabber'). We put on a "pair of *rubbers*," because, when that most multifariously

valuable substance, caoutchouc, was first brought to us, we could find for it no better use than the *rubbing* out of pencil-marks. A whole chapter of literary history is included in the derivation of *romantic* from *Rome*: it tells of the rise of rude popular dialects, alongside the learned and polished Latin, in the various provinces of the Roman empire; and of the rise of modern European fiction, written so distinctively in these dialects that it got its name from them; and, finally, of the tone and style of fictitious writing, and the characters it deals with. In like manner, a chapter of religious history is summed up in the word *pagan* (literally, 'villager'): it tells of the obstinate conservation of heathenism in the villages and hamlets under Roman dominion, when the cities had already learned and embraced Christianity. And, once more, *slave* suggests a chapter in ethnological history: it tells of the contempt in which the *Slaves* or Slavonians of eastern and central Europe were held by the more powerful and cultivated Germans, and of the servitude to which so many of them were reduced. Several among the words we have thus instanced—as *lunatic*, *candidate*, *romantic*, *money*—farther include, as an essential part of their history, the career of one great conquering and civilizing power, the Roman, whose language, along with its knowledge and institutions, has been spread to every part of the globe. The etymology of *moon*, as signifying 'measurer,' has given us an interesting glimpse of the modes of thought of that primitive people who first applied this name to the earth's satellite, and to whom her office as a divider of times was so prominent among her attributes. And this is but one among innumerable instances in which our conceptions of olden times and peoples are aided, are made definite and vivid, by like means. To study the moral and intellectual vocabulary of any tongue is of high interest, and full of instruction as to the laws and phenomena of association which have led to its development out of the earlier signs for physical and sensible things: we are constantly brought to the recognition both of the unity of human nature, as shown by the general resemblances which such study brings to light, and of the diversity of human character and circum-

stance, as exhibited in the etymological variety of corresponding appellations. In this capacity of language to yield to its historical investigator information concerning both the internal life and external history and circumstances of those who have made it what it is, lies, as was pointed out in the outset of our inquiries, no small portion of the interest attaching to linguistic study.

But etymological reminiscences, while thus of the highest value to him who reflects upon language and examines its history, are, as regards the practical purposes of speech, of very subordinate consequence; nay, they would, if more prominent before our attention, be an actual embarrassment to us. Language would be half spoiled for our use by the necessity of bearing in mind why and how its constituents have the value we give them. The internal development of a vocabulary, too, would be greatly checked and hampered by a too intrusive etymological consciousness. All significant transfer, growth of new meanings, form-making, is directly dependent upon our readiness to forget the derivation of our terms, to cut loose from historical connections, and to make the tie of conventional usage the sole one between the thing signified and its spoken sign. Much the greater part of the resources of expression possessed by our language would be struck off at a blow, if a perceived bond of meaning between etymon and derivative were a requisite to the latter's existence and use. Those, then, are greatly in error who would designate by the name "linguistic sense" (*sprachsinn*) a disposition to retain in memory the original *status* and value of formative elements, and the primary significance of transferred terms; who would lay stress upon the maintenance of such a disposition, and regard its wane as an enfeeblement, a step downward toward the structural decay of language. On the contrary, the opposite tendency is the true principle of lively and fertile growth, both of the form and content of speech, and, as we shall see hereafter, it prevails most in the languages of highest character and destiny. A certain degree of vividness, of graphic and picturesque quality, it is true, is conferred upon a term which has been applied by a metaphor to a mental or philosophic use, by the

continued apprehension of the metaphor; but vividness is a quality which is dearly bought at the expense of any degree of objective clearness, of dry and sober precision; and it can always be attained, when really wanted, by new figures, after old figures have become prosaic appellations. As we rise, too, in the scale of linguistic use, from that which is straightforward and unreflective to that which is elaborate, pregnant, artistic, etymological considerations in many cases rise in value, and constitute an important element in that suggestiveness which invests every word, giving it its delicacy of application, making it full of significance and dignity where another term, coarsely synonymous with it, would be tame and ineffective. A pregnant implication of etymologic meaning often adds strikingly to the force and impressiveness of an expression. Yet this is but one element among many, and its degree of consequence is, I am convinced, apt to be over-estimated. To recur once more to some of our former illustrations—while an allusion to the *whiteness* of soul signified in *candid* may touch and interest one whose classical education enables him to recognize and appreciate it, nothing but a joke or a conceit could well be extracted from the etymology of *candidate;* while *apprehend* affords possible ground for a use in which both the physical and intellectual meanings shall be clearly felt, the one enforcing the other, *understand* would lend itself to no such treatment. And most of our words are in the condition of *candid*, *candidate*, and *understand;* either, as in the case of the two last, the etymology is trivial or obscure, or, as in the case of the first, it is within reach only of the learned, and cannot aid the general speaker and hearer. On the whole, a word, both in its direct significance and in its suggestiveness, is just what our usage makes it. Hardly any two vocables that we employ are more instinct with deep meaning, more untranslatable into other tongues, than *home* and *comfort;* yet neither of them borrows aught from etymology; the one signifies by derivation nothing more intimate than the place where one lives, the other, than the conferral of strength (*con-fortare*); nor has either an etymon in English, discoverable without curious research. It is true that *fatherly*,

brotherly, *womanly* have, to our apprehension, a greater depth and intimacy of significance than *paternal*, *fraternal*, *feminine*, and so in many other like cases; yet the part of this which is due to the perceived connection of the former with *father*, *brother*, *woman* is probably less than is usually imagined; the difference of the two classes consists much more in their character as Anglo-Saxon and as Latin respectively, and in the more formal and learned use of the latter class, as is usual with the Latin part of our language, when compared with the other. How independent of all etymological aid is our conventional sense of the meaning of the words we familiarly use may be shown by a great variety of facts in our language. It is convenient to have the various conjugational and declensional parts of our verbs and nouns agree in form as in sense: where we say *I love*, to say also *he loves*, *we love*, *they loved*, *having loved*; where we say *man*, to say also *man's*, *men*, *men's*; yet we say I *am*, he *is*, we *are*, they *were*, having *been*, and *I*, *my*, *we*, *our*, *she* and *her*, *go* and *went*, *think* and *thought*, and so on, without any sense whatever of hesitation or difficulty. So, on the other hand, it gives us no manner of trouble to separate words which ought, according to the usual analogies of the language, to stand in a near relation of meaning together; however close may be their correspondence of form, it does not disturb the independent act of association by which we bind together each separate sign and its own conventional idea: take as instances *home* and *homely*, *scarce* and *scarcely*, *direct* and *directly*, *lust* and *lusty*, *naught* and *naughty*, *clerk* and *clergy*, a *forge* and *forgery*, *candid* and *candidate*, *hospital* and *hospitality*, *idiom* and *idiocy*, *light*, *alight*, and *delight*, *guard* and *regard*, *approach* and *reproach*, *hold*, *behold*, and *beholden*—and it would be easy to gather an indefinite list of such words. They furnish, indeed, only another illustration of that power of the mind over its instruments which appears in the facility and directness wherewith, as has been already pointed out, we select from among the various and often very diverse meanings of a single word—such as *kind*, *like*, *become*, *court*, *head*—that one which the circumstances and the connection require. They help us to apprehend the

true relation of our speech to our thoughts, as being their assistant and means of communication, not their director or indispensable accompaniment.

Our review of the processes constituting the life of language is now completed: in the next lecture, we shall go on to consider the circumstances which hasten or retard their action, and their effect in bringing about the separation of languages into dialects.

LECTURE IV.

Varying rate and kind of linguistic growth, and causes affecting it. Modes of growth of the English language. Influences conservative of linguistic identity. Causes producing dialects; causes maintaining, producing, or extending homogeneity of speech. Illustrations: history of the German language; of the Latin; of the English. The English language in America.

We have, in the last two lectures, occupied ourselves with tracing out and illustrating by typical examples the chief processes of that incessant change, that linguistic growth, which marks a language as living, as undergoing, in the minds and mouths of a community, constant adaptation to their needs, constant adjustment to their preferences and caprices. These processes, as we saw, have to do both with the external form of speech, its spoken and audible body, and with its internal content, its intended and apprehensible meaning. As regards the former, they appeared to be of two general kinds or classes: on the one hand, they partake of the nature of corruption and decay, consisting in the abbreviation and mutilation of existing words, the wearing off of formative elements and consequent loss of forms, the abandonment of old distinctions along with the means of their expression, the dying out of words and phrases from memory and use; on the other hand, they are of the nature of growth, providing for the repair of this waste, and the supply of new additions to the resources of expression, by the putting together of old material into fresh combinations, the elaboration of formative elements out of words possess-

ing independent significance, and the application of accidental differences to the practical uses of significant distinction. And this external decay and growth is accompanied by, and accessory to, a rich and ever-progressing development of ideal content, which deals at its will with all the material of speech, which contracts, expands, and transfers the meanings of words, which converts the physical and concrete into the intellectual and abstract, which produces variety out of sameness, and is never at a loss for means whereby to provide with its suitable sign any fresh acquisition to the sum of things known, any new conception or deduction. In continuing at present our discussion of the life of language, we have first to note the varying rate at which the processes of growth go on, and to bring to light some of the circumstances which affect their progress.

The fact of variation in the rate of linguistic growth, it may be remarked by way of introduction, is a very obvious one. Our own English has changed much less during the past two hundred and fifty years than during the like period next preceding; and vastly less in the last five centuries than during the five which went before them. The German of the present day is not more altered from the ancient type of Germanic speech than was the English of six or seven centuries ago; nor the Icelandic now current than the Anglo-Saxon of King Alfred and his predecessors. The modern Romanic dialects—the Spanish, French, Italian, and the rest—have deviated far more widely from the Latin of Cicero and Virgil than has the dialect of the Greeks from that of Cicero's Hellenic contemporaries; and they differ from one another not a little in the degree, as well as in the mode, of their respective deviation. To go somewhat further from home, the Arabic of the Bedouin in this century is incomparably more nearly identical with that of the tribes through whose borders the children of Israel were led by Moses than is any one of our contemporary European tongues with its ancestor of the same remote period. And there are to be found upon the face of the earth dialects which are even now so rapidly changing that those who speak them would be unable to converse with either their ancestors

or their descendants across an interval of four or five generations.

Now the particular modes and departments of linguistic change are so diverse that no one cause, or kind of causes, can affect them all, or affect them all alike, either to quicken or to retard them. But the plainest and most apprehensible influence is that which is exerted by change of external circumstances, surroundings, mode of life, mental and physical activity, customs and habits; and to this, accordingly, we will first direct our attention. How powerfully such causes may act upon language will be best shown, perhaps, by imagining an extreme case. Suppose an illiterate English family to be cast away upon a coral islet in the Pacific, and to be left there isolated through a succession of generations. How much of our language would at once begin to become useless to them! All that is connected with variety of scenery, as hill and dale, as rock and river; with diversity of season, of temperature, of skyey influences; with wealth of animal and vegetable life; with multifariousness of experience, of occupation, of material, of production—and much more, which it is needless to specify. For a certain period, some part of this might be kept alive by memory and tradition, but not for ever; it would lose its distinctness before the mind, become shadowy, and by degrees die out; and its loss would be facilitated by that stupefying effect which the climate and mode of life, with their restricted limits and dull uniformity, would unavoidably have upon the mind; vigour of thought and liveliness of sentiment would be likely to decline; and, after the lapse of a sufficient period to allow these causes their full effect, the wealth of English speech might be reduced to a poverty comparable with that of some among the present Polynesian dialects. But suppose, on the other hand, a Polynesian family set down in the midst of a country like Iceland, amid magnificent and terrible scenery, amid varieties of nature innumerable, where hard labour and prudent forethought, tasking all the moral and physical energies of man, are needed to preserve life and make it endurable—suppose them to be able to bear and adapt themselves to this tremendous change, and how rapidly would

their language grow in names and expressions for objects, processes, experiences, emotions, relations!

This is but a magnified example of what is always and everywhere going on in language: it expands and contracts in close adaptation to the circumstances and needs of those who use it; it is enriched and impoverished along with the enrichment or impoverishment of their minds. We have already pointed out that the lowest and least educated classes of English speakers use not a tenth of the words which constitute to our apprehension the English tongue; the reduction, then, of the English people in its entirety to the condition of the classes referred to would imply the utter extinction of more than nine-tenths of its resources of expression: and all declension of civilization, decay of natural vigour, intermission of instruction, tends, in its way and measure, toward such a result; while, on the other hand, a race that is growing in knowledge and rising in character makes its tongue richer and nobler at every step of its upward career. But it is needless to insist farther upon a truth so obvious: no one will think of denying that the content of any language, in words and phrases and their meanings, must correspond with and be measured by the mental wealth of the community to whom it belongs, and must change as this changes. It is but the simplest corollary from the truth which we have already established, that men make their own language, and keep it in existence by their tradition, and that they make and transmit it for their own practical uses, and for no other end whatsoever.

A vastly more subtle and difficult question is, in what shall consist the linguistic growth which change of circumstance demands, or to which varying character and choice impel: how far shall it lie in the accession or withdrawal of words and meanings of words, and how far in development or decay of linguistic structure? It was pointed out in our first lecture that change of vocabulary, while it is the most legitimate and inevitable of any that a language undergoes, is also the least penetrating, touching most lightly the essential character of speech as the instrument of thought. And we saw later (p. 83) how such words as

photograph and *telegraph* are brought in and naturalized, fitted with all the inflectional apparatus which the language possesses, without any further consequences. Such are mere additions to speech, which may affect the sum and aggregate value of its resources of expression, often to a considerable extent, without modifying its organism, or altering its grammatical form, its apprehension of relations and command of the means of signifying them. And yet, the same circumstances which lead to the great and rapid development of a vocabulary—especially where it takes place out of native resources, and in a less conscious and artificial way —may have an indirect effect upon grammatical development also; where so much change is going on, so much that is new coming into use, the influence will naturally be felt in some measure in every part of the language. Hints of such a possibility are discoverable even in the modern history of our own speech: *graph*, for example, has been brought in as the final member of so many new compounds that it almost presents itself to the consciousness of English speakers as a formative element, having a given office, and so constituting a part of the apparatus of English derivation; while *ism*, though of ultimate Greek origin, and coming to us through the French, has become a thoroughly English suffix, admitting of the most familiar and extended application in forming new words. So distinct, indeed, is our apprehension of the specific value of the ending *ism* that we are able to cut it off and make an independent word of it, talking of a person's *isms*, or of his favourite *ism*—as we also speak, less familiarly, of *ana*, 'personal reminiscence and anecdote,' or, in a half-humorous way, of the *ologies*, 'branches of learned study.'

We cannot, perhaps, better illustrate this subject of the modes of linguistic change as determined in their respective degree of operation by the influence of circumstances, than by briefly examining the way in which our own speech is now adapting itself to the growing needs of its speakers. The call upon it for increase of expressiveness during the past century and at the present time has been and is hardly less than would have been that upon the dialect of our

imagined Polynesians in their new Icelandic home. Doubtless there was never before in the history of the world a time when men were accumulating with such rapidity knowledge of the past history and present constitution of the whole universe of created things—knowledge which is not, it is true, necessarily wisdom or virtue, but which can and ought to turn to both. A part, now, of this new knowledge —and a part of the highest importance to the general community—is such as calls for no change whatever in language, because it consists only in the better understanding of things long since observed and named. However much astronomy and physics may teach us respecting the *sun* and the *planets*, we continue to call them as of old; the words *heat*, *cold*, *light*, *green*, *blue*, *red* stand their ground in general use, notwithstanding the new vibratory theories, and the wonderful discoveries lately made in the spectrum of colours; pudding-stone is *pudding-stone*, and trap is *trap*, now as before the geologist had explained the origin of either; substances still *fall* to the earth and *rise* and *float* in the air, even after the discovery of gravitation; rubbed amber and the loadstone *attract*, as they did ere men had heard of electricity and magnetism as cosmical forces. There is, and evidently in the nature of the case can be, no limit to the extent to which a language may thus become impregnated with clearer knowledge and deeper meaning; and it has been already pointed out (p. 21) that the speech of different individuals at the same period may vary to almost any degree in the implication of these qualities, not less than the speech of the general community at different periods. But in great part, also, the modern additions to knowledge have been of such a sort as to demand the provision of a store of new signs: they have included an immense number of new particulars, things before unobserved or confounded with others under the same names, but which, being made the subject of distinct conceptions, have come to require specific appellations, that men might communicate with one another respecting them. Even this want has in some measure been filled without external change of the language, by the internal development of its resources, as illustrated in the preceding lecture, by the

application of a not inconsiderable number of old words to new uses. Whenever any branch of knowledge, any art or science, either originates or is extended and perfected, the natural impulse is always to subserve its new uses with our old phraseology. The new classifications, substances, processes, products are not so unlike those already familiar to us that they may not be largely called by the same names, without fear of obscurity or error. Every technical vocabulary is thus made up to no small extent of the terms of common life, more precisely or more pregnantly used. The botanist talks of *leaves* and *flowers;* but in either term he includes some things that the common man would exclude, and the contrary. *Current*, *conductor*, *induction*, in the mouth of the electrician, mean things of which he who knows nothing of physics has no conception. Many a man who is aware that *cohere* means 'stick together' would be at a loss to distinguish *cohesion* from *adhesion*. *Atom*, *base*, *acid*, *salt*, *affinity*, *reaction*, are but instances of the words innumerable to which the chemist has given a new and special significance. In fact, the whole apparatus of common speech, as applied to the more definite and sharply distinguished uses of science, undergoes a kind of working-over and adaptation, which is of every degree, from such a conscious and artificial application as that of the word *salt*, used to express a large class of chemical compounds regarded as analogous with the substance formerly called by that name, down to such simple limitation or distincter apprehension of the true force of a term as is hardly separable from that change of implication without change of identity which we have illustrated above, by reference to the words *sun*, *heat*, *rise* and *fall*, etc. The mode of linguistic growth which we are now considering does, indeed, shade off into the former one, and is most nearly akin with it, in nature and in necessity. No language can possibly lose the capacity for it without losing its very life; in some languages, as we shall see hereafter, it is compelled to do the whole work of linguistic adaptation, external growth being a thing unknown.

In our own tongue, however, external growth, as represented by the formation of new derivatives, and new combin-

ations of existing materials, is not altogether extinct, though reduced to a comparatively low grade of activity, and restricted in sphere. To its chief modes of action we have already, in other connections, had occasion to refer. It consists mainly in what we have called the *mobilization* of our words, the application to them of those formative elements which still remain to us with capacity of living use, and by which we produce both inflections and derivative words, as we have need of them.. Increase of these our means of internal development is all but impracticable. Our most recent organically developed suffix is the adverbial ending *ly*, which has been found above so valuable in illustrating the general method of suffix-formation. Yet not a few elements of Latin origin have won by degrees the right to play an active part in the making of new English words: such are the prefixes *en*, *dis*, *re*, the suffixes *ment*, *ess*, *able*, *ous*, *ic*, *ize*, *ism*, *fy*, and others; nor, as we have seen, is the possibility even of farther additions to the list totally cut off. An instance of a rather artificial and abnormal extension of formative apparatus was afforded us by the introduction of the chemical terminology referred to in the last lecture (p. 122); the modern history of scientific nomenclature presents other similar cases; and the exigencies of common use, directed by the custom and authority of the learned, may yet cause some of these ingrafted elements to germinate and flourish as integral parts of the general system of speech. No such results are at all likely to follow from the combination and integration of elements of our own proper language which are now independent. Of composition, as a means of enrichment of our vocabulary, we make at present but a limited use: *steamboat* and *railroad* are familiar representatives of a class which, though not inconsiderable in numbers, forms a far less proportion of the modern growth in our tongue than in most others of its kindred.

Such of the needs of language-making as are not supplied by us in the methods already noticed are satisfied by the borrowing of words from other tongues; and this, as every one knows, is an expedient to which excessive resort is had in English. Our dictionaries have been filled up with

thousands upon thousands of Greek and Latin words; and thousands more, too purely technical as yet to be admitted into the dictionaries, are current among certain classes of our community. The circumstances, external and internal, which give such prevalence among us to this mode of linguistic growth, are many and various. First among them, we may refer to the scantiness of our formative apparatus, and the indisposition to an extensive production of new compounds which characterizes our speech: these limitations to the capacity of internal development compel a recurrence to external wealth. Then, the combination into which our originally Germanic dialect was forced, by pressure of historical conditions, with the Romanic tongue of the conquering Normans, while it brought immediately into general use a host of terms of classical origin, opened the door for their indefinite multiplication, by creating analogies to which they could attach themselves, giving them such support in popular usage as took away the strangeness of aspect which they would else have had. Yet it is true that the words of common life, those which every English-speaking child learns first and continues to use oftenest, are overwhelmingly of Anglo-Saxon origin, are Germanic: Latin and Greek derivatives come in abundantly with culture, learning, special scientific training. And this explains in part the modern preponderance of such derivatives. The knowledge which they are introduced to represent is of a learned cast, not interesting in its details the general community of English speakers, nor accessible to them; belonging, rather, to a special class, which feels itself more closely united by bonds of community with like classes in other nations than with the mass of its own countrymen. There is a fellowship, a solidarity, among the chemists of Europe and America, for instance, which makes them name things on principles accepted among themselves, and out of languages known alike to them all, rather than out of the stores of expression, and in accordance with the usages, of their own vernaculars. It is doubtful whether any language that ever existed could have made provision healthily, from its own internal resources, for the expression of that infinite number of new particulars which

modern science has been pouring in of late upon the general aggregate of knowledge. Think, for example, of the perplexity of the naturalist who returns from an exploring tour with a thousand new species of plants and animals, if he were compelled to devise vernacular designations for them all! And how useless the effort! They will remain for ever unknown to nineteen twentieths, perhaps, of those who speak his speech, and if one or another of them should ever become introduced to general knowledge, they would easily enough acquire familiar names. No modern language, then, whatever its superiority to the English in the capacity of internal growth, attempts to fill such departments of expression otherwise than by borrowing from the Latin and Greek, happy in the possession of stores so rich, so accessible, and so manageable, to draw upon. The names of animal and vegetable species, of their parts and specific differences, of mineral elements and compounds, of processes and relations, and so forth, are Latin or Latinic through the whole civilized world. If the German is more inclined to favour terms of native growth, and for *hydrogen, oxygen, acid*, says "water-substance" (*wasserstoff*), "sour-substance" (*sauerstoff*), "sourness," (*säure*), and the like, it may be seriously doubted whether the gain is of appreciable value. We have seen how little the act of association which binds together idea and sign is dependent upon the aid of etymological suggestiveness; and the forcing of a great variety of new specific meanings in a brief space of time upon the old material of a tongue may make quite as much for confusion as for intelligibility and vividness of expression. It is comparatively easy for a community to provide out of its vernacular resources of speech for that ordinary growth of knowledge, experience, and wisdom which comes in the main by the working over of conceptions already acquired and named, and only in lesser degree by the apprehension of new particulars; but we have only to rejoice that our language is by fortunate circumstances saved from a strain which the present conditions of our culture would otherwise have put upon it, and which is more severe than any living tongue has ever been obliged to endure.

But even things of the most common use and knowledge come to bear with us designations of learned and artificial make. A certain showy flower, introduced not very long ago by learned intervention to the parterres of the wealthy, but now found in every poor man's garden, and almost as familiar as the sun-flower or the rose, is known only by the name *dahlia*, given it by its botanical describer in honour of an earlier botanist, Dahl. The *telegraph*, a scientific device, keeps its foreign scientific title, not in our own country only, but all over the globe, although it has become an institution almost as universal and indispensable as the post. A substance over whose discovery and application no small part of our community has gone wild within the past few years, has not retained its honest English appellation of *rock oil*, or *mineral oil*, but has accepted from the learned the equivalent Latin name *petroleum*, and is so called by millions who have no knowledge whatever of the derivation and meaning of the term. The influence of the learned class in the process of English names-giving has been for many centuries a growing one, and has now become greatly predominant; and with it has grown, somewhat unduly, the introduction of classic word and phrase, to supplement, or even to replace, native English expression. There is a pedantically learned style which founds itself on the Latin dictionary rather than the English, and discourses in a manner half unintelligible except to the classically educated: but this is only the foolish exaggeration of a tendency which has become by degrees an integral part of English speech. To draw in like manner upon the resources of any other tongue (as, for instance, upon the German) would be a fault of a very different character — a pure impossibility, an intolerable affectation, because unsupported by anything in the previous usages of our mother-tongue.

We see, then, that the most obvious and striking peculiarity of English linguistic growth, the wholesale importation of foreign terms, is one by which it differs only in degree from other linguistic growth, ancient and modern, and that this degree of difference is explained by the circumstances of the case—the learned character of much of the knowledge

demanding representation, the sluggishness of the native processes of word-formation, and the presence of numerous words of classic origin in our familiar speech; all which circumstances have begotten and fostered a habit of resorting more and more for the supply of new needs to the accessible and abundant stores of classical expression. The determining causes are wholly historical. The inaptness for internal development, the aptness to borrow, which distinguish our language from others of Germanic origin, are both mainly traceable to the Norman invasion. In consequence of that event, the Anglo-Saxon was for a time in danger of extinction, or of reduction to the rank of a vulgar *patois*. Political conditions, severing Anglo-Norman interests from those of the continent, and originating a common English feeling in the whole population, notwithstanding its diverse elements, led to a fusion of Norman-French and Saxon-English, instead of a displacement of the latter by the former: but, when the new tongue came forth, it was found shorn of much of its grammatical power, greatly altered in its forms and modes of construction. The purity and directness of linguistic tradition had been broken up; the conservative influence exercised upon the foundation-language by the cultivated class of its speakers had been for a time destroyed, and popular inaccuracies and corruptions allowed full sway; a mode of speech was learned by considerable masses of a population to whose fathers it was strange and barbarous; the rest had admitted to their daily and familiar use a host of new words on which their old apparatus of inflection sat strangely: and this was the result. So is it likely ever to be, when the intermingling on nearly equal terms of races of diverse speech issues in the elaboration, by mutual accommodation and compromise, of a new mixed dialect which all shall learn and use alike.

We must be careful not to mistake the nature of the obstacle which prevents the liberal increase of our vocabulary by means of combination of old materials. It is wholly subjective, consisting in our habits and preferences. There is hardly a compound formed in German, for example, which would not, if literally translated by an English compound,

be understood, and which we might not therefore imitate, if intelligibility were all that we had to consult in our word-making. But we are obliged also to have in view the prepossessions of the community; and this is not a thing which they are used to and will approve. The whole process of language-making and language-changing, in all its different departments, is composed of single acts, performed by individuals; yet each act is determined, not alone by the needs of the particular case, but also by the general usages of the community as acting in and represented by the individual; so that, in its initiation as well as its acceptance and ratification, it is virtually the act of the community, as truly conventional as if men held a meeting for its discussion and decision.

We have hitherto considered chiefly the effect of circumstances upon the growth of language, its enrichment with the means of designating new conceptions and representing new judgments. We have also briefly to examine their influence upon linguistic decay, upon phonetic change and grammatical corruption. These, as has been already sufficiently pointed out, are the result of the defective tradition of language; by carelessness in the acquisition of words, or by inaccuracy in their reproduction, men change from generation to generation the speech which they transmit. It is evident, then, that everything which assists the accuracy of linguistic tradition tends to preserve the phonetic and grammatical structure of language from alteration. Where speech is most unconsciously employed, with most exclusive attention to the needs and conveniences of the moment, with least regard to its inherited usages, there its changes are rifest. Any introduction of the element of reflection is conservative in its effect. A people that think of their speech, talk about it, observe and deduce its rules and usages, will alter it but slowly. A tendency to do this sometimes forms a part of a nation's peculiar character, being the result of qualities and circumstances which it is well-nigh or quite impossible to trace out and explain; but often it is called forth, or favoured and strengthened, by very obvious conditions; by admiring imitation of the ways and words of

them of old time; by the possession of a traditional literature; but, most of all, by a recorded literature, the habit of writing, and a system of instruction. Culture and education are the most powerful of all the forces which oppose linguistic change. The smallest conceivable alterative influence will emanate from one who has been trained to speak correctly by a conscious effort, and who is accustomed to write what he says almost as frequently and naturally as he speaks it. Words, in their true form and independent entity, are too distinctly present to his mind for him to take part either in their fusion or mutilation. Hence the effect of literary culture is to fix a language in the condition in which it happens to be found, to assure to it the continued possession of the formative processes which are then active in its development, but to check or altogether prevent its acquisition of any others; to turn its prevailing habits into unalterable laws; and to maintain its phonetic character against anything but the most gradual and insidious change.

Thus far in the history of the world, this kind of conservative influence has usually been active only within the limits of a class; a learned or priestly caste has become the guardian of the national literature and the conservator of the tongue in which it was written; while to the masses of the people both have grown strange and unfamiliar. Deprived of the popular support, the cultivated dialect has at once begun to lose its vitality; for no language can remain alive which is not answering all the infinitely varied needs of a whole community, and adapting itself in every part to their changes; it is stinted of its natural and necessary growth when it is divorced from general use and made the exclusive property of a class. Thus there come to exist among the same people two separate tongues; the one an inheritance from the past, becoming ever more stiff and constrained, and employable only for special uses; the other the production of the present, growing constantly more unlike the other by the operation of the ordinary processes of linguistic change; full of inaccuracies and corruptions, if we choose to call them so, but also full of a healthy and vigorous life, which enables it finally to overthrow and replace the learned

or sacred dialect of which it is the offspring. Such has been the origin and such the fate of all the learned dialects which, in various parts of the world, have been preserved as "dead languages," for the purposes of learned communication, after losing their character as the vernacular speech of a community: for instance, the ancient Egyptian, long kept up for sacred uses, and written in the hieroglyphic signs, after both language and letters had in popular use taken on another form; the Zend, in the keeping of the ministers of Zoroaster's doctrine; the Sanskrit, even yet taught in the Brahmanic schools of India, amid the Babel of modern dialects, its descendants; the Latin, the common language of the educated through all Europe, for centuries during which the later forms of Romanic speech, now the vehicles of a culture superior to that of Greece and Rome, were mere barbarous *patois*. Every dialect which is made the subject of literary culture is liable to the fate of the Latin; aristocracy and exclusiveness tend to final overthrow, in language as in politics; the needs and interests of the many are more important than those of the few, and must in the end prevail. True linguistic conservatism consists in establishing an educated and virtuous democracy, in enlisting the whole community, by means of a thorough and pervading education, in the proper and healthy preservation of the accepted usages of correct speech—and then in letting whatever change must and will come take its course. There is a purism which, while it seeks to maintain the integrity of language, in effect stifles its growth: to be too fearful of new words and phrases, new meanings, familiar and colloquial expressions, is little less fatal to the well-being of a spoken tongue than to rush into the opposite extreme.

It is hardly needful to point out that these desirable conditions are much more nearly realized in the case of our modern cultivated and literary languages than in those of olden time, and that the former have, in all human probability, a destiny before them very different from that of the latter. In the present constitution of society, among the enlightened nations of Europe and America, the forces conservative of the general purity of language have attained a

development and energy to which only a distant approach was made under the most favourable circumstances in ancient times. The conscious and reflective users of speech, the instructed and cultivated, the writers of their thoughts, have become everywhere a class powerful in numbers as well as dominant in influence. Education, no longer confined to the upper layer, more or less pervades the whole mass of the people. Books are in every one's hands, assimilating and establishing the written and spoken usages of all. That form of the common speech in each country which has enlisted in its support the best minds, the sweetest and most sonorous tongues, is ever gaining ground upon the others, supplanting their usages, and promising to become and to continue the true popular language.

In America, the influences we have now been considering wear a somewhat peculiar form. On the one hand, the educated class nowhere else embraces so large a portion of the community, or has so vast a collective force; on the other hand, and partly for this very reason, the highest and best-educated class have less power here than in the less democratic countries of the Old World: the low-toned party newspaper is too much the type of the prevailing literary influence by which the style of speech of our rising generation is moulding. A tendency to slang, to colloquial inelegancies, and even vulgarities, is the besetting sin against which we, as Americans, have especially to guard and to struggle. To attain that thorough democracy which is the best life and vigour of language, to keep our English speech vivid with the thought and feeling of a whole people, we should not bring down the tone and style of the highest, nor average those of all classes; we should rather lift up the lower to the level of the higher.

Our review of the causes which determine the respective part played by the different processes of linguistic growth, and the rate at which they severally act, is far from being exhaustive. To treat the subject with thoroughness would require a treatise. Parts of it are of extreme subtlety and difficulty. Our attention has been directed almost solely to external historical circumstances, those of which the effect

is most easily traced. We have but hinted here and there at the more recondite and most potent influences which are deep-seated in the individual character of different tongues and the qualities of the people who speak them. That complex and intricate combination of native capacities and dispositions, acquired and inherited habits, and guiding circumstances, of which, in each individual community, the form and development of the common speech is a product, is in no two communities the same, and everywhere requires a special and detailed study in order to its comprehension. Ethnologists are obliged, in the main, to take the differences of national character as ultimate facts, content with setting them clearly forth, not claiming to explain them; and a like necessity rests upon the linguist as regards linguistic differences: not only can he not account for the presence of peculiarities of character which determine peculiarities of speech, but even their analysis eludes his search; they manifest themselves only in these special effects, and are not otherwise demonstrable. To ascribe the differences of language and linguistic growth directly to "physical causes," to make them dependent on "peculiarities of organization," whether cerebral, laryngal, or other, is wholly meaningless and futile. Language is not a physical product, but a human institution, preserved, perpetuated, and changed, by free human action. Nothing but education and habit limits any man to the idiom in the possession of which he has grown up; within the community of speakers of the same tongue may readily be found persons with endowments as unlike, in degree and kind, as those which characterize the average men of distant and diverse races. Physical causes do, indeed, affect language, but only in two ways: first, as they change the circumstances to which men have to adapt their speech; and second, as they alter men's nature and disposition. Every physical cause requires to be transmuted into a motive or a mental tendency, before it can affect the signs by which we represent our mental acts. It is universally conceded that physical circumstances do produce a permanent effect upon the characteristics of race, internal as well as external, and so upon those, among the rest, which govern linguistic

development; but in what measure, at what rate, and through what details of change, is as yet matter of the widest difference of opinion and the liveliest controversy. There are headlong materialists who pronounce man the slave and sport of nature, guided and controlled by the external forces amid which he exists, and who claim that his history may be explained and foretold by means of a knowledge of those forces; when as yet they have not found out even the A-B-C of the modes in which human nature is moulded by its surroundings. These men have their counterparts also among students of language. But, whatever may be hoped from the future, it is certain that at present nothing of value has been done toward showing how linguistic growth is affected in its kind and rate by physical causes. There is no human dialect which might not maintain itself essentially unaltered in structure, though carried to climes very unlike those in which it had grown up, and though employed by a people whose culture and mode of life was rapidly varying; emigration, often assumed to be the chief and most powerful cause of linguistic change, also often appears to exercise a conservative influence. And, on the other hand, a language may rapidly disintegrate, or undergo phonetic transformation, or vary the substance of its vocabulary, without moving from the region of its origin, or becoming the organ of other conditions of human life. When linguistic scholars can fully account for such facts as that the Icelandic is the most antique in form of the idioms of its family, that the Lithuanian has preserved more of the primitive apparatus of Indo-European inflection than any other known tongue of modern times, that the Armenian has become with difficulty recognizable as an Iranian dialect, that the Melanesian, African, and American languages are the most changeful of human forms of speech—then, perhaps, they may claim to comprehend the circumstances that regulate the growth of language.

The variation of language in space, its change from one region to another, is a not less obvious fact than its variation in time, its change from one epoch to another. The earth is filled with almost numberless dialects, differing

from one another in a greater or less degree, and some of them, at least, we know by historical evidence to be descendants of a common original. This state of things finds its ready and simple explanation in the principles which have been already laid down; they will demand, therefore, but a brief application and further illustration.

We have been speaking, when treating of the growth of language, of vital processes, as going on in the body of speech itself, like the process of fermentation in bread, or of the displacement and replacement of tissues in an animal organism. But we have been careful, at the same time, to bear in mind that the word "process" was thus used only in a figurative sense. Every item of change which goes to make up the growth of human speech is ultimately a result of the conscious effort of human beings. In language, the atoms which compose the fermenting mass and the growing tissue are not inert matter, acted on by laws of combination and affinity, but intelligent creatures, themselves acting for a purpose. A process of linguistic growth, then, is only the collective effect, in a given direction, of the acts of a number of separate individuals, guided by the preferences, and controlled by the assent, of the community of which those individuals form a part. And upon the joint and reciprocal action on language of the individual and the community depend all the phenomena of dialectic separation and coalescence.

For, in the first place, it is evident that the infinite diversity of character and circumstance in the intelligent beings who have language in charge must tend to infinite diversity in their action and its products. Each independent mind, working unrestrainedly according to its own impulses, would impress upon the development of speech a somewhat different history. It was shown almost at the beginning of our discussions (p. 22) that no two men speak exactly the same tongue: of course, then, they would not propagate the same. Each has his own vocabulary, his own pet words and phrases, his own deviations from the normal standard of pronunciation, of construction, of grammar; the needs of each are in some degree unlike those of others; his mind is somewhat differ-

ently impressed and guided by feelings and experiences, differently swayed by the weight of existing analogies. Such tendency to variation is, to be sure, within comparatively narrow limits; individual speakers of English would not, if left to their own devices, rush madly off toward a Choctaw or Kamchatkan model of speech; yet its results are by no means imperceptible or insignificant; it is like the variation of the separate individuals of a species of plants or animals in respect to traits of structure and disposition, which, however slow its progress, would finally, if suffered to accumulate its effects, break up the species into well-marked varieties. Linguistic development is thus made up, as we may fairly express it, of an infinity of divergent or centrifugal forces.

But, in the second place, there is not wanting an effective centripetal force also, which holds all the others in check, which resolves them, giving value to that part of each which makes in a certain direction, and annulling the rest: this centripetal force is the necessity of communication. Man is no soliloquist: he does not talk for his own diversion and edification, but for converse with his fellows; and that would not be language which one individual alone should understand and be able to employ. Every one is, indeed, as we have already seen, engaged in his way and measure in modifying language; but no one's action affects the general speech, unless it is accepted by others, and ratified in their use. Every sign which I utter, I utter by a voluntary effort of my organs, over which my will has indefeasible control; I may alter the sign as I please, and to any extent, even to that of substituting for it some other wholly new sign; only, if by so doing I shock the sense of those about me, or make myself unintelligible to them, I defeat the very end for which I speak at all. This is the consideration which restrains me from arbitrariness and license in the modification of my speech, and which makes me exert my individual influence upon it only through and by the community of which I am a member. If those who form one community do not talk alike, and cannot understand one another, the fundamental and essential office of speech is not fulfilled. Hence, what-

ever changes a language may undergo, they must all be shared in by the whole community. The idiosyncrasies, the sharp angles and jutting corners, of every man's idiom must be worn off by attrition against those with which it comes in contact in the ordinary intercourse of life, that the common tongue may become a rounded unit. This does not imply an absolute identity of dialect, down to the smallest details, among all the constituent members of a community; within certain limits—which, though not strictly definable, are sufficiently distinct and coercive to answer their practical purpose perfectly well—each one may be as original as he pleases: he may push his oddity and obscurity to the very verge of the whimsical and the incomprehensible—or even beyond it, if he do not mind being misunderstood and laughed at; if his sense of his own individuality be so exaggerated that he is a whole community, a world, to himself. Nor must the word community, as used with reference to language, be taken in a too restricted or definite sense. It has various degrees of extension, and bounds within bounds: the same person may belong to more than one community, using in each a different idiom. For instance: I have, as we may suppose, a kind of home dialect, containing a certain proportion of baby-talk, and a larger of favourite colloquialisms, which would sound a little queerly, if they were not unintelligible, to any one outside of my family circle; as an artisan, pursuing a special branch of manufacture or trade, or as one engaged in a particular profession, or study, or department of art, I am a member of another community, speaking a language to some extent peculiar, and which would be understood neither by my wife and children nor by the majority of speakers of English. Thus, I may have dived deep into the mysteries of some scheme of transcendental philosophy, or searched and pondered the ultimate physical constitution of atoms; and, if I should discourse to a general audience of that which to me is full of profoundest significance and interest, while one out of twenty, perhaps, would follow me with admiring appreciation, to the other nineteen I should seem an incomprehensible ranter. But even as a general speaker of English,

qualified to meet and converse intelligently with others who claim the same title, upon matters of import to us all, I may have my speech marked more or less strongly with local or personal peculiarities; it may exhibit unusual tones of utterance, or unusual turns of phrase, which, if I would be readily and thoroughly understood, I must endeavour to avoid. Now all these differences of speech, limited as their range may be, are in their essential nature dialectic; the distinction between such idioms, as we may properly style them, and well-marked dialects, or related but independent languages, is one, not of kind, but only of degree. For I also possess a considerable portion of my language in common with the Netherlander, the German, and the Swede, to say nothing of my remoter relations, the Russian, the Persian, and the Hindu; and if, in talking with any one of them, I could only manage to leave out of my conversation such words as belong to my dialect alone, and moreover, not to pronounce the rest with such a local peculiarity of tone, nor give them such special shades of meaning, he and I might get along together famously, each of us understanding all the other said. I can, indeed, make calculations and compose mathematical formulas with him all day long; or, if we are chemists, we can compare our views as to the constitution of all substances, organic and inorganic, to our mutual edification; since, as regards their mathematical and chemical language, their systems of notation and nomenclature, all who share European civilization form but a single community.

There is room, then, for all that diversity which was shown in our first lecture to belong to the speech of different individuals and different classes in the same community, along with that general correspondence which makes them speakers of the same language. The influence of community works in various degrees, and within various limits, according to the nature and extent of the community by which it is exercised. The whim of a child and the assent of its parents may make a change in the family idiom; the consent of all the artisans in a certain branch of mechanical labour is enough to give a new term the right to stand in

their technical vocabulary; the majority of good writers and speakers of English is the only authority which can make a word good English in the part of our tongue that we all alike use and value; while all the learned of Europe must join together, in order to alter the notation of a number, or the symbol of a chemical element. But the principle is everywhere the same: as mutual intelligibility is the bond which makes the unity of a language, so the necessity of mutual intelligibility is the power which preserves and perpetuates that unity.

If communication is thus the assimilating force which averages and harmonizes the effects of discordant individual action on language, keeping it, notwithstanding its incessant changes, the same to all the members of the same community, then it is clear that everything which narrows communication, and tends to the isolation of communities, favours the separation of a language into dialects; while all that extends communication, and strengthens the ties which bind together the parts of a community, tends to preserve the homogeneity of speech. Suppose a race, occupying a certain tract of country, to possess a single tongue, which all understand and use alike: then, so long as the race is confined within narrow limits, however rapidly its language may yield to the irresistible forces which produce linguistic growth, all will learn from each, and each from all; and, from generation to generation, every man will understand his neighbour, whatever difficulty he might find in conversing with the spirit of his great-grandfather, or some yet remoter ancestor. But if the race grows in numbers, spreading itself over region after region, sending out colonies to distant lands, its uniformity of speech is exposed to serious danger, and can only be saved by specially favouring circumstances and conditions. And these conditions are yet more exclusively of an external character than those which, as we lately saw, determine the mode and rate of linguistic change in general: they consist mainly in the kind and degree of culture enjoyed and the effects which this naturally produces. In a low state of civilization, the maintenance of community over a wide extent of country is altogether impracticable; the tendency

to segregation is paramount; local and clannish feeling prevails, stifling the growth of any wider and nobler sense of national unity and common interests; each little tribe or section is jealous of and dreads the rest; the struggle for existence arrays them in hostility against each other; or, at the best, the means of constant and thorough communication among individuals of the different parts of the country is wanting, along with the feelings which should impel to it. Thus all the diversifying tendencies are left to run their course unchecked; varieties of circumstance and experience, the subtler and more indirect influences of climate and mode of life, the yet more undefinable agencies which have their root in individual and national caprice, gradually accumulate their discordant effects about separate centres, and local varieties of speech arise, which grow into dialects, and these into distinct and, finally, widely dissimilar languages. The rate at which this separation will go on depends, of course, in no small degree, upon the general rate of change of the common speech; as the dialects can only become different by growing apart, a sluggishness of growth will keep them longer together—and that, not by its direct operation alone, but also by giving the weak forces of an imperfect and scanty communication opportunity to work more effectively in counteraction of the others. Thus all the influences which have already been referred to as restricting the variation of a language from generation to generation are, as such, equally effective in checking its variation from portion to portion of a people. But the most important of them also contribute to the same result in another way, by directly strengthening and extending the bonds of community. Culture and enlightenment give a wonderful cohesive force; they render possible a wide political unity, maintenance of the same institutions, government under the same laws; they facilitate community of memories and traditions, and foster national feeling; they create the wants and tastes which lead the people of different regions to mix with and aid one another, and they furnish the means of ready and frequent intercourse: all of which make powerfully for linguistic unity also. A tra-

ditional literature, sacred or heroic, tends effectively in the same direction. But of more account than all is a written literature, and an organized and pervading system of instruction, whereby the same expressions for thought, feeling, and experience are set as models before the eyes of all, and the most far-reaching and effective style of linguistic communication is established.

Moreover, that same necessity of mutual understanding which makes and preserves the identity of language throughout a community has power also to bring forth identity out of diversity. No necessary and indissoluble tie binds any human being to his own personal and local peculiarities of idiom, or even to his mother-tongue; habit and convenience alone make them his; he is ever ready to give them up for others, when circumstances make it worth his while to do so. The coarse and broad-mouthed rustic whom the force of inborn character and talent brings up to a position among cultivated men, wears off the rudeness of his native dialect, and learns to speak as correctly and elegantly, perhaps, as one who has been trained from his birth after the best models. Those who come up from among the dialects of every part of Britain to seek their fortune in the metropolis acquire some one of the forms of English speech which flourish there; and, even if they themselves are unable ever to rid themselves wholly of provincialisms, their children may grow up as thorough cockneys as if their families had never lived out of hearing of Bow bells. Any one of us who goes to a foreign land and settles there, identifying himself with a community of strange speech, learns to talk with them, as well as his previously formed habits will let him, and between his descendants and theirs there will be no difference of language, however unlike they may be in hue and feature. If adventurers of various race and tongue combine themselves together in a colony and take up their abode in some wild country, their speech at once begins to undergo a process of assimilation, which sooner or later makes it one and homogeneous: how rapidly this end shall be attained, and whether some one element shall absorb the rest, or whether all shall contribute equally to the resulting

dialect, must be determined by the special circumstances of the case. Of the multitudes of Germans whom emigration brings to our shores, some establish themselves together in considerable numbers: they cover with their settlements a tract in the West, or fill a quarter in some of our large towns and cities. They form, then, a kind of community of their own, in the midst of the greater community which surrounds them, having numerous points of contact with the latter, but not absorbed into its structure: there are enough speakers of English among them to furnish all the means of communication with the world about them which they need; they are proud of their German nationality and cling to it; they have their own schools, papers, books, preachers—and their language, though sure to yield finally to the assimilating influences which surround it, may be kept up, possibly, for generations. So also with a crowd of Irish, clustered together in a village or suburb, breeding in and in, deriving their scanty instruction from special schools under priestly care: their characteristic brogue and other peculiarities of word and phrase may have an indefinite lease of life. But, on the other hand, families of foreign nationality scattered in less numbers among us can make no effective resistance to the force which tends to identify them thoroughly with the community of English speakers, and their language is soon given up for ours.

There is evidently no limit to the scale upon which such fusion and assimilation of speech may go on. The same causes which lead an individual, or family, or group of families, to learn and use another tongue than that which they themselves or their fathers have been accustomed to speak, may be by historical circumstances made operative throughout a whole class, or over a whole region. When two communities are combined into one, there comes to be but one language where before there were two. A multiplication and strengthening of the ties which bind together the different sections of one people tends directly toward the effacement of already existing varieties of dialect, and the production of linguistic uniformity.

Such effacement and assimilation of dialectic varieties, not

less than dissimilation and the formation of new dialects, are all the time going on in human communities, according as conditions favour the one or the other class of effects; and a due consideration of both is necessary, if we would comprehend the history of any tongue, or family of tongues. Let us look at one or two examples, which shall serve to illustrate their joint and mutual workings, and to set forth more clearly the truth of the principles we have laid down.

We will consider first the history of that one among the prominent literary languages of the present day which has most recently attained its position, namely the German. From the earliest dawn of history, Germany has been filled with a multitude of more or less discordant dialects, each occupying its own limited territory, and no one of them better entitled than any other to set itself up as the norm of correct German speech. How far back their separation goes, it is impossible to tell; whence, when, and how the first Germanic tribe entered central Europe, that its tongue might become there the mother of so many languages, crowding Germany and Scandinavia, and spreading, through England, even to the shores and prairies of a new world; or whether the beginnings of dialectic division were made before the entrance of the race into its present seats—these are secrets which will never be fully disclosed. There were sweeping changes in the range and character of the Germanic dialects during those ages of migration and strife when Germany and Rome were carrying on their life and death struggle. Whole branches of the German race, among them some of the most renowned and mighty, as the Goths and Vandals, wholly lost their existence as separate communities, being scattered and absorbed into other communities, and their languages also ceased to exist. Leagues and migrations, intestine struggles and foreign conquests, produced fusions and absorptions, extensions, contractions, and extinctions, in manifold variety; but without any tendency to a general unity: and three centuries and a half ago, when the modern German first put forth its claim to stand as the common language of Germany, there was in that country the same Babel of discordant speech as at the

Christian era. Since the introduction of Christianity and the beginnings of civilization, more than one of the High-German dialects, as they are called, the dialects of central and southern Germany, had been for a season the subject of literary culture. This was the case with the idioms, in succession, of the Alemannic, Frankish, and Bavarian divisions of the race, between the seventh and the thirteenth centuries; then, for a time, the Swabian dialect gained the preëminence, and in it was produced a rich and noble legendary literature, containing precious memorials of national heroic story, and still studied and valued wherever the German tongue is spoken. Here was a promising beginning for a truly national language, but the conditions of the times were not yet such as to give the movement lasting and assured success. Three centuries later began the grand national upheaval of the Reformation. The writings of Luther, multiplied and armed with a hundred-fold force by the new art of printing, penetrated to all parts of the land, and to nearly all ranks and classes of the people, awakening everywhere a vivid enthusiasm. The language he used was not the local dialect of a district, but one which had already a better claim than any other to the character of a general German language: it was the court and official speech of the principal kingdoms of central and southern Germany, made up of Swabian, Austrian, and other dialectic elements.* To a language so accredited, the internal impulse of the religious excitement and the political revolutions accompanying it, and the external influence of the press, which brought its literature, and especially Luther's translation of the Bible, into every reading family, were enough to give a common currency, a general value. It was set before the eyes of the whole nation as the most cultivated form of German speech; it was acknowledged and accepted as the dialect of highest rank, the only fitting organ of communication among the educated and refined. From that time to the present, its influence and power have gone on increasing. It is the vehicle of literature and instruction everywhere. Whatever may be the speech of the lower classes in any section, the

* See Schleicher, Deutsche Sprache, p. 107 seq.

educated, those who make up good society, speak the literary German; their children are trained in it; nothing else is written. The popular dialects are still as numerous as ever, because education is not pervading and thorough enough to extirpate them; and their existence may be prolonged for an indefinite period; but the literary language exercises a powerfully repressing and assimilating effect upon them all; it has lessened their rank and lowered their character, by withdrawing from them in great measure the countenance and aid of the cultivated; it has leavened them all with its material and its usages; and it may finally succeed in crowding them altogether out of use. Its sway extends just as far as the external influences which established it reach: it is not confined to the territory occupied by the High-German dialects, its nearest kindred; the people of the northern provinces also, speaking tongues of Low-German descent, which are much more nearly related with the Netherlandish, or even with the English, are drawn by the ties of political, social, and religious community with the rest of Germany to accept and use it. While, on the other hand, political independence, aided by diversity of social and religious usages, has given a separate existence as a literary language to the Dutch or Netherlandish, and yet more notably to the English, descendants of dialects originally undistinguished among the crowd of Low-German idioms which lined the shores of the North Sea.

The history of most other literary languages is of the same character with that which we have just been examining. Each was, at the outset, one out of a number of kindred but more or less diverse forms of speech, and the predominance which it came to gain over them was the result, not of its inherent merits as an instrument of thought and means of communication, but of outward circumstances, which made its usages worth the acquisition of a wider and wider community. Thus the parent language of the modern French was the vernacular speech of only a small part of the population of France; and it long had a rival, and almost a superior, in the early and highly cultivated dialect of southern France, the Provencal, or *langue d'oc;* nor,

if the kingdom of Toulouse had maintained itself, would the latter ever have yielded to the former: but the sceptre of political supremacy over all France passed into the keeping of the northern provinces, and their speech became the rule of good usage throughout the land, while the *langue d'oc* lost by degrees its character as a cultivated dialect, and survives only in rude and insignificant provincial *patois*. The Italian was, in like manner, the popular idiom only of Tuscany, one of the innumerable local dialects which crowd and jostle one another between the Alps and Sicily, and its currency among the educated classes of the whole peninsula is the effect of literary influence and of instruction.

An illustration of a somewhat different character is afforded us by the history of the Latin, a history in many respects more remarkable than that of any other language which has ever existed. This conquering tongue—whose descendants now occupy so large and fair a part of Europe, and, along with their half-sister, the English, fill nearly all the New World, and numerous scattered tracts, coasts, and islands, on every continent and in every ocean, while its material has leavened and enriched the speech of all enlightened nations—was the vernacular idiom, not twenty-five centuries ago, of a little isolated district in middle Italy, a region which, on any map of the world not drawn upon a scale truly gigantic, one might easily cover with the end of a finger. How and when it came there, we know not; but it was one of a group of related dialects, descendants and joint representatives of an older tongue, spoken by the first immigrants, which had grown apart by the effect of the usual dissimilating processes. Remains of at least two of these sister dialects, the Oscan and the Umbrian, are still left in existence, to exercise the ingenuity of the learned, and to illustrate the ante-historic period of Italic speech. The Latin was pressed on the north by the Etruscan, and threatened from the south by the Greek, languages of much more powerful races, and the latter of them possessing a higher intrinsic character, and an infinitely superior cultivation: no one could then have dared to guess that its after career

would be so much more conspicuous than theirs. Its spread began with the extension of Roman dominion, and was the plainest and most unequivocal sign of the thorough and penetrating nature of that dominion. Not content with the loose and nominal sway which the Persian sovereign exercised over the heterogeneous parts of his vast empire, or the yet laxer authority of the modern Mongol rulers over their wider conquests, the Romans infused, as it were, a new organic life into the vast body corporate of which they were the head, and made their influence felt through its every nerve and fibre. Italy they first subjected and Romanized. The yoke they imposed, and riveted by their military colonies, their laws and institutions, their culture, and their all-penetrating administration, was a bond of community against which no other proved able to maintain itself; all the languages of the peninsula, from the Gaulish of the north to the Greek of the extreme south, gave way by degrees before the tongue of the conquering city, and Italy became a country of one uniform speech. And yet not wholly uniform: relics of the ancient languages maintained themselves for a long time in certain more inaccessible districts, and their influence was doubtless to be distinctly seen in the varying local dialects of the different parts of the peninsula —as, indeed, traces of it are even now discoverable there. The common speech of Italy, too, setting aside these dialectic distinctions, was not the pure polished Latin of Cicero and Virgil, but a ruder idiom, containing already the germs of many of the changes exhibited by the modern Italian and the other Romanic tongues. The same process of conquest and incorporation into the Roman community was carried farther, upon a grand and surprising scale, into the other countries of Europe. The Celts of Gaul, the Celts and Iberians of Spain, gave up their own languages and adopted that of their rulers and civilizers, not less completely than have the Celts of Ireland, within the last few centuries, exchanged their Irish speech for English: of Celtic words and usages only scanty and unimportant traces are to be found in the modern French and Spanish. The same fate threatened Germany, had not her brave and hardy tribes

offered too stubborn a resistance to the already waning forces of the empire; and Britain also, had not its remote situation and inferior value as a province caused the Roman hold upon it to be weak, and soon abandoned. Less considerable tracts of south-eastern Europe, stretching from the northern border of Italy to near the mouth of the Danube, yielded to the same influence: subdued by the arms, colonized from the population, organized by the policy, civilized by the culture, of the great city, they learned also to talk her language, forgetting their own. Thus arose the great and important group of the Romanic languages, as they are called; namely, the Italian, the French, the Spanish and Portuguese, the Rhæto-Romanic of southern Switzerland, and the Wallachian—each including a host of varying dialects, all lineal descendants of the Latin, all spoken by populations only in small part of Latin race.

We must not suppose, however, that a pure and classical Latin was ever the popular dialect of this wide-extended region of Europe, any more than of Italy after its first Romanization. The same counteracting causes, acting on a grander scale and with an intensified force, prevented correctness and homogeneity of speech. The populace got their Latin rather from the army and its followers, the colonists and low officials, than from educated Romans and the works of great authors. Doubtless there was not at first such a difference between the dialect of the highest and of the lowest that they could not understand one another. But, whatever it was, it rapidly became wider: while study and the imitation of unchanging models kept the scholars and ecclesiastics in possession of the classical Latin, only a little barbarized by the irresistible intrusion into it of words and constructions borrowed from vernacular use, the language of the masses grew rapidly away from it, breaking up at the same time into those innumerable local forms to whose existence we have already referred. There was no conserving and assimilating influence at work among the millions who had taken for their own the language of Rome, capable either of binding them fast to its established usages or of keeping their lines of linguistic growth parallel. Special disturbing

forces came in here and there. Incursions and conquests of German tribes brought an element of Germanic speech into the tongues alike of Spain, France, and Italy. Centuries of Saracen domination engrafted upon the Spanish language a notable store of words of Arabic derivation. When, at length, the dark ages of European history were over, and knowledge and culture were to be taken out of the exclusive custody of the few, and made the wealth and blessing of the many, the Latin was a dead language, much too far removed from popular wants and sympathies to be able to serve the needs of the new nations. Hence the rise in each separate country, at not far from the same time, of a new national tongue, to be the instrument and expression of the national culture. All Romanized Europe was in the condition already described as that of Germany prior to the advancement of the modern German to its present position; a chaos of varying dialects was there; and, in every case, external historical circumstances determined which of them should attain a higher value, and should subject and absorb the rest.

In all this alternate and repeated divergence and convergence of dialects there is evidently nothing which needs to be looked upon as mysterious, or even puzzling. Such has been the history of language from the beginning, and in all parts of the earth. We need only the tendency of individual language to vary, and the effect of community to check, limit, and even reverse this tendency, in order to explain every case that arises: the peculiar conditions of each case must decide whether their joint action shall, on the whole, make for homogeneity or for diversity of speech; and the result, in kind and in degree, will vary according to the sum of the causes which produced it; as the resultant motion, in rate and direction, combines and represents all the forces, however various and conflicting, of whose united action it is the effect.

Thus, as has been already pointed out, when there takes place a fusion of two communities, larger or smaller, of varying speech, no general law can determine what shall be the resulting dialect. When the Romans conquered Gaul, although forming only a minority of the population, they,

almost totally obliterated the Gaulish speech, putting the Latin in its place, for they brought with them culture and polity, art and science, learning and letters: they made it better worth while for the Celts to learn Latin than to adhere to their own ancient idiom. When, however, the Germanic Franks, a few centuries later, conquered in their turn the now Latinized Gaul, and turned it into a kingdom of France, they adopted the language of their more numerous and more cultivated subjects, only adding a small percentage of Germanic words to its vocabulary, and perhaps contributing an appreciable influence toward hastening the decay, already well in progress, of the Latin grammatical system. The same thing happened once more, when the Scandinavian Northmen, representing another branch of the Germanic family, after extorting from the beaten and trembling monarchs of France the cession of one of her fairest provinces, became the not less formidable and dreaded Normans. Although placed in seemingly favourable circumstances for conserving their linguistic independence, crowded together as they were within comparatively narrow bounds, and making on their own ground, of which they were absolute masters, the majority of the population, they yet could not resist the powerful assimilating influences which pressed them, a horde of uncouth and unlearned barbarians, on every side. Within a wonderfully short time, their Norse tongue had altogether gone out of use, leaving traces only in a few geographical names: along with French manners, French learning, and French polity, they had implicitly adopted also French speech. Hardly was this conversion accomplished, when they set forth to propagate their new linguistic faith in a country occupied by dialects akin with that which they had recently forsworn. The Angles and Saxons, Germanic tribes, had meantime finished the task, only begun by the Romans, of extirpating upon the largest and best part of British ground the old Celtic speech. They had done it in a somewhat different way, by sheer brute force, by destroying, enslaving, or driving out the native population, and filling all but the most inaccessible regions of the island with their own ferocious tribesmen. Hence

the wholly insignificant remains of Celtic material to be found among the ordinary stores of expression of our English tongue. Christianity and civilization found the invaders in their new home, and an Anglo-Saxon literature grew up, which, had circumstances continued favourable, might have aided national unity of government, institutions, and culture to assimilate the varying dialects of the country, producing a national language not inferior in wealth and polish to our present speech. But they who take the sword shall perish by the sword: upon the Anglo-Saxons were wreaked the woes they had themselves earlier brought upon the Celts. Danish and Norse invasions, during a long period, bitterly vexed and weakened the Saxon state, and it finally sank irrecoverably under the Norman conquest. This time, the collision of two diverse languages, upborne by a nearly equal civilization—the partial superiority of that of the Normans being more than counterbalanced by their inferiority in numbers—under the government of political circumstances already explained, produced a result different from any which we have thus far had occasion to notice—namely, a truly composite language, drawing its material and its strength in so nearly equal part from the two sources that scholars are able to dispute whether the modern English is more Saxon or more French. Into the details of the combination we cannot now stay to enter, but must pass on to note the later dialectic history of the language, merely directing attention to the important and familiarly known fact that its formative apparatus—whether consisting in inflections, affixes of derivation, or connectives and relational words—along with the most common and indispensable part of its vocabulary, remained almost purely Saxon, so that it is to be accounted still a Germanic dialect in structure, although furnished with stores of expression in no small part of Romanic origin.

The fusion of Saxon and Norman elements in English speech did not reach in equal measure all parts of the land or all classes of the people, nor did it by any means wipe out previously existing dialectic differences, thus furnishing a new and strictly homogeneous speech as a starting-point

whence a new process of dialectic divergence should commence. On the contrary, Britain is still, like Germany, only in a less degree, a country full of dialects, some of whose peculiarities go back to the diversities of speech among the tribes by whom the Anglo-Saxon conquest of the island was achieved, thirteen hundred years ago, while the rest are of every date of origin, from that remote period to the present. One or two of these dialects—especially the Scottish and the Yorkshire—poetry and fiction have made somewhat familiarly known to us; others are matters of keen and curious interest to the student of language, their testimony being hardly less essential than that of the literary dialect to his comprehension of the history of English speech.

But it was impossible that, in the transfer of English to the continent of America, these local dialects should maintain themselves intact; that could only have been the result of a separate migration of parts of the local communities to which they belonged, and of the continued maintenance of their distinct identity in their new place of settlement. Such was not the character of the movement which filled this country with an English-speaking population. Old lines of local division were effaced; new ties of community were formed, embracing men of various province and rank. It was not more inevitable that the languages of the various nationalities which have contributed to our later population should disappear, swallowed up in the predominant English, than that the varying forms of English should disappear, being assimilated to that one among them which was better supported than the rest. Nor could it be doubtful which was the predominant element, to which the others would have to conform themselves. In any cultivated and lettered community, the cultivated speech, the language of letters, is the central point toward which all the rest gravitate, as they are broken up and lose their local hold. And our first settlers were in no small part from the instructed class, men of high character, capacity, and culture. They brought with them a written language and a rich literature; they read and wrote; they established schools of every grade, and

took care that each rising generation should not fall behind its predecessor in learning. The basis, too, of equality of rights and privileges on which they founded their society added a powerful influence in favour of equality of speech. As a natural and unavoidable consequence, then, of these determining conditions, and not by reason of any virtue for which we are to take credit to ourselves, the general language of America, through all sections of the country and all orders of the population, became far more nearly homogeneous, and accordant with the correct standard of English speech, than is the average language of England. And the same influences which made it so have tended to keep it so: the democratic character of our institutions, and the almost universality of instruction among us, have done much to maintain throughout our community an approximate uniformity of idiom. There was doubtless never a country before, where, down to the very humblest classes of the people, so many learned to read and spell out of the same school-books, heard the same speakers, from platform, desk, and pulpit, and read the same books and papers; where there was such a surging to and fro of the population, such a mixture and intimate intercourse of all ranks and of all regions. In short, every form of communication is more active and more far-reaching with us than ever elsewhere; every assimilating influence has had unequalled freedom and range of action. Hence, there was also never a case in which so nearly the same language was spoken throughout the whole mass of so vast a population as is the English now in America. Modern civilization, with the great states it creates, and the wide and active intercourse among men to which it prompts and for which it affords the needed facilities, is able to establish upon unoccupied soil, and then to maintain there, community upon a scale of grandeur to which ancient times could afford no parallel.

Nor have we failed to keep nearly even pace with our British relations in the slow progressive development of the common tongue: our close connection with the mother-country, the community of culture which we have kept up with her, our acknowledgment of her superior authority in

matters of learning and literature, have been able thus far to restrain our respective lines of linguistic growth from notable divergence. Though we are sundered by an ocean, there have been invisible ties enough between us to bind us together into one community. Yet our concordance of speech is not perfect: British purism finds fault with even our higher styles of discourse, oral and written, as disfigured by Americanisms, and in both the tone and the material of colloquial talk the differences are, of course, much more marked. We have preserved some older words, phrases, and meanings which their modern use discards; we have failed as yet to adopt certain others which have sprung up among them since the separation; we have originated yet others which they have not accepted and ratified. Upon all these points we are, in the abstract, precisely as much in the right as they; but the practical question is, which of the two is the higher authority, whose approved usage shall be the norm of correct English speaking. We have been content hitherto to accept the inferior position, but it is not likely that we shall always continue so. Our increasing numbers and our growing independence of character and culture will give us in our own estimation an equal right, at the least, and we shall feel more and more unwilling to yield implicitly to British precedent; so that the time may perhaps come when the English language in America and the English language in Britain will exhibit a noteworthy difference of material, form, and usage. What we have to rely upon to counteract this separating tendency and annul its effect is the predominating influence of the class of highest cultivation, as exerted especially through the medium of literature. Literature is the most dignified, the most legitimate, and the most powerful of the forces which effect the conservation of language, and the one which acts most purely according to its true merit, free from the adventitious aids and drawbacks of place and time. It is through her literature that America has begun, and must go on, to win her right to share in the elaboration of the English speech. Love and admiration of the same master-works in poetry, oratory, philosophy, and science has hitherto made one community

of the two great divisions of speakers of English, and ought to continue to unite them—and it will, we hope, do so: but more or less completely, according as that portion of the community which is most directly reached and effectively guided by literature is allowed authority over the rest.

We are, however, by no means free from dialects among our own population, although we may hope that they will long, or always, continue to be restricted within narrow limits of variation from the standard of correct speech, as they are at present. The New Englander, the Westerner, the Southerner, even of the educated class, betrays his birth to a skilled observer by the peculiarities of his language; and the lower we descend in the social scale, the more marked and prominent do these peculiarities become. There is hardly a locality in the land, of greater or less extent, which has not some local usages, of phrase or utterance, characterizing those whose provincialism has not been rubbed off by instruction or by intercourse with a wider public. There is a certain degree of difference, too, of which we are all conscious, between the written and the colloquial style: there are words and phrases in good conversational use, which would be called inelegant, and almost low, if met with in books; there are words and phrases which we employ in composition, but which would seem forced and stilted if applied in the ordinary dealings of life. This is far from being a difference sufficient to mark the literary English as another dialect than that of the people; yet it is the beginning of such a difference; it needs no change in kind, but only a change in degree, to make it accord with the distinction between any literary language which history offers to our knowledge and the less cultivated dialects which have grown up in popular usage by its side, and by which it has been finally overthrown and supplanted.

Nothing, then, as we see, can absolutely repress dialectic growth; even the influences most powerfully conservative of identity of language, working in the most effective manner which human conditions have been found to admit, can only succeed in indefinitely reducing its rate of progress.

It will be noticed that we have used the terms "dialect" and "language" indifferently and interchangeably, in speaking of any given tongue; and it will also have been made plain, I trust, by the foregoing exposition how vain would be the attempt to establish a definite and essential distinction between them, or give precision to any of the other names which indicate the different degrees of diversity among related tongues. No form of speech, living or dead, of which we have any knowledge, was not or is not a dialect, in the sense of being the idiom of a limited community, among other communities of kindred but somewhat discordant idiom; none is not truly a language, in the sense that it is the means of mutual intercourse of a distinct portion of mankind, adapted to their capacity and supplying their needs. The whole history of spoken language, in all climes and all ages, is a series of varying and successive phases; external circumstances, often accidental, give to some of these phases a prominence and importance, a currency and permanence, to which others do not attain; and according to their degree of importance we style them idiom, or *patois*, or dialect, or language. To a very limited extent, natural history feels the same difficulty in establishing the distinction between a "variety" and a "species:" and the difficulty would be not less pervading and insurmountable in natural than in linguistic science, if, as is the case in language, not only the species, but even the genera and higher groups of animals and plants were traceably descended from one another or from common ancestors, and passed into each other by insensible gradations. Transmutation of species in the kingdom of speech is no hypothesis, but a patent fact, one of the fundamental and determining principles of linguistic study.

LECTURE V.

Erroneous views of the relations of dialects. Dialectic variety implies original unity. Effect of cultivation on a language. Grouping of languages by relationship. Nearer and remoter relations of the English. Constitution of the Indo-European family. Proof of its unity. Impossibility of determining the place and time of its founders; their culture and customs, inferred from their restored vocabulary.

HAVING previously considered in some detail the various modes of change in language—the processes of linguistic life, as, by an allowable figure, we termed them—we went on at our last interview to direct our attention to the circumstances and conditions which govern the working of those processes, giving prominence to the one or the other of them, and quickening or retarding their joint effects. We then proceeded to inquire into the manner in which the same processes operate to divide any given form of speech, with the lapse of time, into varying forms, or to convert a language into dialects. We passed in review the causes which favour the development of dialectic differences, as well as those which limit and oppose such development, and even tend to bring uniformity out of diversity. They are, we found, of two general kinds: the one, proceeding from individuals, and founded on the diversities of individual character and circumstance, tend to indefinite separation and discordance; the other, acting in communities, and arising from the necessity of mutual intelligence, the grand aim and purpose of language, make for uniformity and assimilation,

sacrificing a merely personal to a more comprehensive unity, merging the individual in the society of which he is a member. Language is an institution founded in man's social nature, wrought out for the satisfaction of his social wants; and hence, while individuals are the sole ultimate agents in the formation and modification of every word and meaning of a word, it is still the community that makes and changes its language. The one is the molecular force; the other, the organic. Both, as we saw, are always at work, and the history of human tongues is a record of their combined effects; but the individual diversifying forces lie deeper down, are more internal, more inherent in the universal use of speech, and removed from the control of outward circumstances. Language, we may fairly say, tends toward diversity, but circumstances connected with its employment check, annul, and even reverse this tendency, preserving unity, or producing it where it did not before exist.

One or two recent writers upon language * have committed the very serious error of inverting the mutual relations of dialectic variety and uniformity of speech, thus turning topsy-turvy the whole history of linguistic development. Unduly impressed by the career of modern cultivated dialects, their effacement of existing dialectic differences and production of homogeneous speech throughout wide regions, and failing to recognize the nature of the forces which have made such a career possible, these authors affirm that the natural tendency of language is from diversity to uniformity; that dialects are, in the regular order of things, antecedent to language; that human speech began its existence in a state of infinite dialectic division, which has been, from the first, undergoing coalescence and reduction. It may seem hardly worth while to spend any effort in refuting an opinion

* I refer in particular to M. Ernest Renan, of Paris, whose peculiar views upon this subject are laid down in his General History of the Semitic Languages, and more fully in his treatise on the Origin of Language (2nd edition, Paris, 1858, ch. viii.)—a work of great ingenuity and eloquence, but one of which the linguistic philosophy is in a far higher degree constructive than inductive. Professor Max Müller, also, when treating of the Teutonic class of languages (Lectures on Language, first series, fifth lecture), appears distinctly to give in his adhesion to the same view.

of which the falsity will have been made apparent by the exposition already given; yet a brief additional discussion of the point will afford us the opportunity of setting in a clearer light one or two principles whose distinct apprehension is necessary in order to the successful prosecution of our farther inquiries.

It will be readily admitted that the difference between any given dialect and another of kindred stock is made up of a multitude of separate items of difference, and consists in their sum and combined effect: thus, for instance, words are possessed by the one which are wanting in the other; words found in both are differently pronounced by each, or are used in senses either not quite identical or very unlike; combinations and forms belong only to one, or are corrupted and worn down in diverse degrees by the two; phrases occur in the one which would be meaningless in the other. Now the gradual production of such differences as these is something which we see to have been going on in language during the whole period of its history illustrated by literary records; nay, which is even going on at the present day under our own eyes. If the Italian uses in the sense of 'truth' the word *verità*, the Spanish *verdad*, the French *vérité*, the English *verity*, we know very well that it is not because all these forms were once alike current in the mouths of the same people, till those who preferred each one of them sorted themselves out and combined together into a separate community; it must be because some single people formerly used in the same sense a single word, either coincident with one of these or nearly resembling them all, from which they have all descended, in the ordinary course of linguistic tradition, that always implies liability to linguistic change. We happen to know, indeed, in this particular case, by direct historical evidence, what the original word was, and who were the people that used it: it was *vēritāt* (nominative *veritas*), and belonged to the language of Rome, the Latin: its present varieties of form merely illustrate the usual effects of phonetic corruption. So, too, if I say *attend!* and the Frenchman *attendez!* our words differ in pronunciation, in grammatical form (the latter having a plural ending which the

former lacks), and in sense (the French meaning 'wait!'); and, in all these respects save the last, both differ from the Latin *attendite;* yet of this both are alike the hereditary representatives: no Roman ever said either *attend* or *attendez.* But this same reasoning we apply also in other cases, where direct historical evidence is wanting, arriving without hesitation or uncertainty at like conclusions. If we say *true,* while the German says *treu,* the Dane *tro,* the Netherlander *trouw,* and so on, we do not once think of doubting that it is because we have all gotten nearly the same word, in nearly the same sense, by uninterrupted tradition from some primitive community in which a like word had a like sense; and we set ourselves to discover what this word was, and what and why have been the changes which have brought it into its present varying forms. The discordance between our *father,* the Anglo-Saxon *fæder,* the Icelandic *fadir,* the Dutch *vader,* and the German *vater,* does not, any more than that between *verity* and its analogues, compel us to assume a time when these words existed as primitive dialectic varieties in the same community: we regard them as the later effects of the separation of one community into several. And when we compare them all with the Latin *pater,* the Greek *patēr,* the Persian *peder,* the Sanskrit *pitar*—all which are but palpable forms of the same original from which the rest have come—our inference is still the same. Or, to recur once more to an example which we have already had occasion to adduce, our word *is* is the English correspondent of the German *ist,* the Latin *est,* the Greek *esti,* the Lithuanian *esti,* the Slavonian *yest',* the Persian *est,* the Sanskrit *asti.* To the apprehension of the historical student of language, all these are nothing more than slightly varying forms of the same vocable: their difference is one of the innumerable differences of detail which distinguish from one another the languages we have named. We cannot, to be sure, go back under the sure guidance of contemporary records to the people among whom, and the time at which, the word originated: but we are just as far in this case as in those referred to above from being driven to the conclusion that all its present representatives are equally primitive, that they consti-

tute together the state of indefinite dialectic variety in which the expression of the third person singular of the verb *to be* began, and that the nations, modern or ancient, in whose languages we find them are the lineal descendants of those groups in a former community who finally made up their minds to prefer the one or the other of them. On the contrary, we derive, with all the confidence belonging to a strictly logical process of reasoning, the conclusion that the words we are considering are later variations of a single original, namely *asti*, and that they would have no existence if a certain inferrible community, at an unknown period in the past, had not put together the verbal root *as*, signifying 'existence,' and the pronoun *ti*, meaning 'that,' to form that original.

The same reasoning is applicable to every other individual instance of dialectic difference. And it is so applied, in each individual instance, even by those who maintain the priority of dialects: such comparison and inference as we have been illustrating constitute the method of linguistic research of the comparative philologists, among whom they too desire to count themselves. Only they fail to note that the whole sum of dialectic difference is made up of instances like these, and that, if the latter point back, in detail, to an original unity, the former must, in its entirety, do the same. "As there were families, clans, confederacies, and tribes," we are told,* "before there was a nation, so there were dialects before there was a language." The fallacy involved in this comparison, as in all the reasoning by which is supported the view we are combating, is that it does not go back far enough; it begins in the middle of historic development, instead of at its commencement. If families, clans, and tribes were ultimate elements in the history of humanity, if they sprang up independently, each out of the soil on which it stands, then the indefinite diversity of human language in its early stages—a diversity, however, fundamental, and not dialectic—might follow, not only as an analogical, but as a direct historical consequence. But, if a population of scattered communities implies dispersion from a single point,

* Max Müller, *l.c.*

if we must follow back the fates of our race until they centre in a limited number of families or in a single pair, which expanded by natural increase, and scattered, forming the little communities which later fused together into greater ones—and who will deny that it was so?—then, also, both by analogy and by historical necessity, it follows that that is the true view of the relation of dialects and language to which we have been led above: namely, that growth and divarication of dialects accompany the spread and disconnection of communities, and that assimilation of dialects accompanies the coalescence of communities.

Prevalence of the same tongue over wide regions of the earth's surface was, indeed, impossible in the olden time, and human speech is now, upon the whole, tending toward a condition of less diversity with every century; but this is only owing to the vastly increased efficiency at present of those external influences which counteract the inherent tendency of language to diversity. As, here in America, a single cultivated nation, of homogeneous speech, is taking the place of a congeries of wild tribes, with their host of discordant tongues, so, on a smaller scale, is it everywhere else: civilization and the conditions it makes are gaining upon barbarism and its isolating influences. In the fact that Frenchmen, Spaniards, and Italians, on entering our community, all learn alike to say with us *verity*, there is nothing which at all goes to prove that *verity*, *vérité*, *verdad*, and *verità* are primitive dialectic varieties, tending toward unity; nor, in the extended sway of the cultivated tongues of more modern periods, is there aught which in the most distant manner favours the theory that dialects are antecedent to uniform speech, and that the latter everywhere grows out of the former.

It is true, again, that a certain degree of dialectic variety is inseparable from the being of any language, at any stage of its history. We have seen that even among ourselves, where uniformity of speech prevails certainly not less than elsewhere in the world, no two individuals speak absolutely the same tongue, or would propagate absolutely the same, if circumstances should make them the founders of independent linguistic traditions. However small, then, may have been

the community which laid the basis of any actually existing language or family of languages, we must admit the existence of some differences between the idioms of its individual members, or families. And if we suppose such a community to be dispersed into the smallest possible fragments, and each fragment to become the progenitor of a separate community, it might be said with a kind of truth that the languages of these later communities began their history with dialectic differences already developed. The more widely extended, too, the original community before its dispersion, and the more marked the local differences, not inconsistent with mutual intelligibility, existing in its speech, the more capital, so to speak, would each portion have, on which to commence its farther accumulation of dialectic variations. But these original dialectic differences would themselves be the result of previous growth, and they would be of quite insignificant amount, as having been able to consist at the outset with unity of speech; they might be undistinguishable even by the closest analysis among the peculiarities of idiom which should have arisen later; and it would be the grossest error to maintain either that these last were original and primitive, or that they grew out of and were caused by the first slight varieties: we should rather say, with entire truth, that the later dialects had grown by gradual divergence out of a single homogeneous language.

In an uncultured community, the value of such minor discordances of usage as may exist, and do always exist, among those who yet, as being able to communicate freely with one another, are to be regarded as speaking the same tongue, is at its maximum. The first effect of the cultivation of a language, as we style it, is to wipe out this class of differences, extending the area and perfecting the degree of linguistic uniformity. And its work is accomplished, first as last, whether the scale of variation over which its influence bears sway be less or greater, by selection, not by fusion. The varying usages of different individuals and localities are not averaged, but the usages of one part of the community are set up as a norm, to which those of the rest shall be conformed, and from which farther variation shall be

checked or altogether prevented. An element of consciousness, of reflectiveness, is introduced into the use of language; acknowledged imitation of certain models, deference to authority in matters of speaking, take the place of the former more spontaneous and careless employment of the common means of communication, governed only by the necessities of communication, which are always felt but not always reasoned upon. The best speakers, those who use words with most precision, with most fulness and force of meaning, with most grace and art, become the teachers of the rest. And however this influence be exerted, whether by simple recognition of authority in those who deserve it, or with the aid of a popular literature, handed down by tradition, or whether it rise to grammatical and lexical culture, to the possession of letters and learning, it is of the same nature; it produces its conserving and ennobling effects in the same way. It is the counsellor and guide, not the master, of national usage. It undertakes no wholesale reformation. It does not shear off from a language masses of unnecessary means of expression which untaught speakers would fain force upon it; it finds no such materials to deal with. Some write and speak as if the uncultivated employer of speech were impelled to launch out indefinitely into new words and forms, rioting in the profusion of his linguistic creations, until grammar comes to set bounds to his prodigality, and to reduce the common tongue within reasonable dimensions. But it is by no means so easy and seductive a thing to increase the resources of a language. We do not look to our dictionaries and grammars to know if we may use elements which come crowding to our lips and demanding utterance. Linguistic growth is a slow process, extorted, as it were, by necessity, by the exigencies of use, from the speakers of language. The obligation resting upon each one of making himself intelligible to his fellows, and understanding them in turn, is the check, and a sufficient one, upon individual license of production. Economy is a main element in linguistic development; that which is superfluous in a dialect, not needed for practical use, falls off and dies of itself, without waiting to be lopped away by the pruning-

knife of a grammarian. Culture chooses, from among the varieties of equivalent form, utterance, and phrase which a defective communication has allowed to spring up within the limits of the same community, those which shall be accepted as most worthy of preservation. It maintains what is good, warns against abuses, and corrects offences committed by a part against the authority of prevailing usage. A cultivated language is thus simply one whose natural growth has gone on for a certain period under the conscious and interested care of its best speakers; which has been placed in their charge, for the maintenance of a standard, for the repression of disfiguring alterations, for enrichment with expressions for higher thought and deeper knowledge; for the enforcement, in short, of their own studied usages of speech upon the less instructed and more heedless masses of a community.

It is obviously futile to attempt to draw anywhere a dividing line in the development of language—to say, these differences on the one side are the result of later linguistic growth; those, on the other side, are original, a part of the primitive variety and indefiniteness of human speech. The nature and uses of speech, and the forces which act upon it and produce its changes, cannot but have been essentially the same during all the periods of its history, amid all its changing circumstances, in all its varying phases; and there is no way in which its unknown past can be investigated, except by the careful study of its living present and its recorded past, and the extension and application to remote conditions of laws and principles deduced by that study. Like effects, as we have already had occasion to claim, imply like causes, not less in the domain of language than in that of physical science; and he who pronounces the origin and character of ancient dialects and forms of speech to be fundamentally different from those of modern dialects and forms of speech can only be compared with the geologist who should acknowledge the formation by aqueous action of recent gravel and pebble-beds, but should deny that water had anything to do with the production of ancient sandstones and conglomerates.

The continuity and similarity of the course of linguistic history in all its stages, and the competency of linguistic correspondences, wherever we find them, to prove unity of origin and community of tradition, are truths which we need to bear in mind as we proceed with our inquiries into language. If we meet in different tongues with words which are clearly the same word, notwithstanding differences of form and meaning which they may exhibit, we cannot help concluding that they are common representatives of a single original, once formed and adopted by a single community, and that from this they have come down by the ordinary and still subsisting processes of linguistic tradition, which always and everywhere involve liability to alteration in outer shape and inner content. It is true that there are found in language accidental resemblances between words of wholly different origin: of such we shall have to take more particular notice in a later lecture (the tenth): but exceptions like these do not make void the rule; the possibility of their occurrence only imposes upon the etymologist the necessity of greater care and circumspection in his comparisons, of studying more thoroughly the history of the words with which he has to deal. It is also true that real historical correspondences may exist between isolated words in two languages without implying the original identity of those languages, or anything more than a borrowing by the one out of the stores of expression belonging to the other. Our own tongue, for instance, aside from its wholesale composition out of the tongues of two different races, draws more or less of its material from nearly every one of the languages of Europe, and from not a few of those of Asia, Africa, and America. Yet it is evident that such borrowing has its limits, both of degree and of kind, and that it may be within the power of the linguistic student readily to distinguish its results from the effects of a genuine community of linguistic tradition.

The method by which we are to proceed in grouping and classifying the languages spoken by mankind, now and in former times, results with necessary consequence from the principles which we have laid down. We have seen that no given form of speech remains permanently the same: each

changes continually, in its structure and content, and tends to divide, with the progress of time, into varying forms or dialects. No existing language, no recorded language, is original; each is the descendant of some earlier one, from which, perhaps, other existing or recorded languages are equally descended. With this easy clew to guide us, the labyrinth of human speech is a labyrinth no longer; it is penetrated by paths which we may securely follow. We have simply to group together according to their affinities the languages known to us; connecting, first of all, those whose totality of structure, along with what history actually teaches us of their derivation, shows them so plainly to be forms of the same original that even the most exaggerated scepticism could not venture to deny their relationship; then going on to extend our classification from the more clearly to the more obscurely, from the more closely to the more remotely connected, until we have done the utmost which the nature of the case permits, until analysis and deduction will carry us no farther. The way is plain enough at first, and even the most careless may tread it without fear of wandering; but to follow it to the end demands, along with much labour and pains, no little wariness and clearness of vision.

Let us, then, turn aside for a time from pursuing the direct course of our fundamental inquiry, "why we speak so and so," to ask who "we" are to whom the inquiry relates; who, along with us that acknowledge the various forms of the English as our native speech, use languages which are, after all, only dialectic forms of one great original mother-tongue.

The results of such an investigation into the relationship of the English language have been, to a certain extent, taken for granted during our whole discussion. This was unavoidable: we could not otherwise have talked at all of genetic connection, or illustrated the processes of linguistic growth. Now, however, we have to take up the subject more systematically, showing the extent to which the tie of relationship reaches, and presenting some of the evidence which proves its reality.

To assert that the slightly differing forms of speech which

prevail in the various parts of our own country, and even the more noteworthy dialects found among the classes of the population of Britain, form together only one language, is to assert a truism: no man in his sober senses would presume to doubt it. Let any one, however ignorant of history he may be, go about the globe, finding on each side of the Atlantic, and scattered from island to island, communities who speak English, though tinged with local colouring, and it will not enter into his mind to doubt that they were scattered thither from some common centre, that they all have their accordant speech by community of linguistic tradition. A like conclusion is reached almost as directly, if we follow back to the continent of Europe the traces of those adventurous tribes which, as history distinctly informs us, colonized at no very remote date the British isles, and note what languages are still spoken upon the shores whence they set forth on their career of conquest. The larger and more indispensable part of English, as has been already pointed out, finds its kindred in Germany, whence came the Saxon and Anglian portion of our ancestry. The community of tradition between the English and the German, Netherlandish, Swedish, Danish, and so on, is so pervading, and its evidences are so patent to view, that no one, probably, who has ever added a knowledge of either of the languages named to that of his English mother-tongue has failed to be struck by it, and to be convinced that, in their main structure and material, the two were one speech. But his experience has also taught him that the difference between them is far from being inconsiderable, and that, unfortunately for him, he is by no means able to speak and write German or Swedish, because English, like them, is Germanic. If an American, he will talk readily with an educated Englishman; he will even make shift to understand a Yorkshireman, a broad Scotchman, or an Irishman fresh from his native bogs; but put him and a German together, and the two are well-nigh as deaf and dumb to each other as if the one of them were a Greek or a Hindu. Plainly enough, the explanation of their difficulty is simply this: these two Germanic dialects, originally one language and belonging to a single community,

have been now so long separated, and their independent changes in the interval have been so great, that free and intelligent communication is no longer possible between those who have learned to speak them: one must have somewhat of instruction in both in order to be able to discover the fact of their relationship.

Not all the Germanic languages, however, are allied with the English in equal degree. The Low-German dialects, as they are called, those which occupy the northern shores and lowlands of the country, stand notably nearer to our tongue than do the dialects of central and southern Germany, the literary High-German and its next of kin. This relation is readily and sufficiently accounted for by the circumstances of the Germanic emigration to Britain: our ancestors came from the shore provinces, and brought with them the forms of speech there prevailing. And there is yet another principal group of Germanic languages, coördinate with the two already mentioned: it occupies the outliers of Germany to the north, namely Denmark, Sweden and Norway, and their remote colony of Iceland. It is usually called the Scandinavian group. We have in our own present speech not a few traces of its peculiar words and usages, imported into England by those fierce Northmen—or Danes, as English history is accustomed to style them—whose incursions during many centuries so harassed the Saxon monarchy.

These three groups or classes of existing dialects, the Low-German, the High-German, and the Scandinavian, with their numerous subdivisions, constitute, then, a well-marked family of related languages; although those who speak them can only to a very limited extent understand one another, the same sentence or paragraph could not be written in any two of them without bringing to light such and so many resemblances as even to a superficial examination would appear sure proof of a genetic connection. It is past question that all the Germanic dialects are descendants and joint representatives of a single tongue, spoken somewhere, at some time in the past, by a single community, and that all the differences now exhibited by them are owing to the

separation of this community, in the progress of time, into detached and somewhat isolated portions, with the consequent breaking up into diverging lines and currents of the common stream of their linguistic tradition. It is even clear that, so far as concerns the surviving dialects, the divergence was primarily into three main branches, now represented by the three groups of languages which have been defined above.

How it happens that our vocabulary also contains so large a store of words that are foreign to all the other Germanic dialects, but are shared with us by the nations of southern Europe, was fully set forth in the last lecture. We saw that the Normans—who, though a people of Germanic blood, had lived long enough in France to substitute the idiom of that country for their own forgotten tongue—imported into England a new current of linguistic tradition, which, after a time, mingled peacefully in the same bed with the former one. The languages with which ours is thus brought into a kind of relationship by marriage were seen to be the French, the Spanish and Portuguese, the Italian, the Rhæto-Romanic, and the Wallachian, each including a host of minor dialects. The descent of these tongues, constituting together the Romanic group or family, from a common mother, the Latin, is written down in full upon the pages of history, and has been by us already briefly reviewed.

That these two important families of human language, the Germanic and the Romanic, are also in remoter degree related to one another and to other ancient and modern families, as joint branches of a yet more extensive family, is a truth equally undeniable, although not equally obvious. That it might be so is evident enough, according to the principles which we have already established respecting the life of language. There is no limit assignable to the extent to which the descendants of a common linguistic stock may diverge and become separated from one another. The question is one of fact, of evidence. Only a careful and thorough sifting of their linguistic material can determine how far the ramifications of genetical relationship may bind together languages apparently diverse. If two kindred tongues can, by divergent growth, come to differ from each other as much

as English and German, there is no *à priori* ground for believing that they may not come to differ as much as English and Polish, or Greek, or Hindustani. And, by approved scientific methods of linguistic research, students of language have traced out the boundaries of a grand family of human speech, embracing, along with the Germanic and Romanic groups, nearly all the other tongues of Europe, and those of no small portion of south-western Asia. We will accordingly go on first to pass in review the various branches claimed to constitute this family, and then to examine the evidence upon which the claim is founded.

Of nearest kindred with the Latin, as well as most nearly associated with it in history, is the ancient Greek, its classic compeer, but its superior in flexibility and beauty; superior, too, as regards the genius and culture of those to whom it served as the instrument of thought; but of far less conspicuous career, and making at the present day but an insignificant figure in the sum of human speech, being spoken only by the scanty population of Greece itself, and by the peoples, partly of Greek origin, which fill the islands and line the shores of the Ægean and Black seas.

The languages displaced by the Latin were, as we have seen, in great part Celtic. At the beginning of the historic period, the domain of the Celts included no mean portion of the soil of Europe. Britain, Gaul, a part of Spain, and the north of Italy, together with some of the provinces of central Europe, were in their possession. But the more energetic and persistent Italic and Germanic races soon began to gain ground upon them: and now, for a long succession of centuries, no Celtic tribe of any importance has maintained its integrity and independence. The Erse, or Gaelic of the Scotch Highlands, the native Irish, or Gaelic of Ireland, and the insignificant dialect of the Isle of Man, representing together the Gadhelic division of Celtic speech—and the Welsh in Wales, and the Breton or Armorican in Brittany, representatives of the other, the Cymric division, are the scanty remains of that great family of related tongues which, but little more than two thousand years ago, occupied

more territory than German, Latin, and Greek combined; and they are all, probably, on their way to extinction.

The eastern part of Europe is mainly filled by the numerous branches of another important family, the Slavic or Slavonic. Although somewhat encroached upon on the west by the Germanic, it has, upon the whole, from inconspicuous beginnings, grown steadily in consequence since its first appearance on the stage of history, and now occupies a commanding position eastward, as the vehicle of civilization to northern and central Asia. It covers most of Russia in Europe, with Poland, the eastern provinces of Austria, and the northern of Turkey. Among its principal branches are the Russian, with numerous subdivisions, the Polish, the Bohemian, the Servian, and the Bulgarian. All these are as distinctly and closely akin with one another as are the modern Germanic dialects.

A more remotely allied branch of the same family, constituting almost a family by itself, occupies a narrow territory about the great bend of the Baltic sea, from the gulf of Finland to beyond the German frontier, and comprises the Lithuanian, the Livonian or Lettish, and the Old Prussian. The latter is already extinct, and the others also appear to be going gradually out of existence, under pressure of the assimilating influence exerted upon them by the languages of the surrounding more powerful communities.

We have thus reviewed all the languages of modern Europe, excepting, first, the Albanian, which is the living representative of the ancient Illyrian, and of which the connections are doubtful (although it is likely to be yet proved to belong with the rest, as a branch of the same stock); secondly, the Basque, in the Pyrenees, a wholly isolated and problematical tongue; thirdly, the Hungarian, with its relatives, the Finnish and Lappish of the extreme north, and other languages spoken by scattered tribes in northern and eastern Russia; and finally, the Turkish and its congeners, which do but overlap slightly the south-eastern frontier. These two last groups, as we shall see hereafter (in the eighth lecture), are of a kindred that occupies no small part

of northern and central Asia. But before we have gathered in all the members of the great family we are seeking to establish, we must cross the border of Europe, and enter southern Asia.

Asia Minor is chiefly in the hands of Turkish tribes, who have crowded themselves in there in comparatively modern times, driving out, or subjecting and assimilating, the previous occupants. The same races stretch eastward, across the southern extremity of the Caspian sea, intervening between Europe and the countries whose speech shows affinity with that of Europe. But within, in the hilly provinces of Media and Persia, and on the great Iranian table-land, which stretches thence to the Indus, we find again abundant traces of a linguistic tradition coinciding ultimately with our own. The Persian, with all its dialects, ancient and modern, and with its outliers on the north-west and on the east—as the Armenian, the Kurdish, the Ossetic, and the Afghan—constitutes a branch of our family, the Persian or Iranian branch. And yet one step farther we are able to pursue the same tie of connection. The Iranian languages conduct us to the very borders of India: beyond those borders, in Hindustan, between the bounding walls of the Himalayas and Vindhyas, and eastward to the mouths of the Ganges, lies the easternmost branch of that grand division of human speech to which our own belongs, the Indian branch, comprising the ancient Sanskrit, with its derived and kindred languages.

The seven groups of languages at which we have thus glanced—namely, the Indian, the Persian, the Greek, the Latin, the Slavonic (including the Lithuanic), the Germanic, and the Celtic—each made up of numerous dialects and sub-dialects, are the members composing one vast and highly-important family of human speech, to which, from the names of its two extreme members, we give the title of "Indo-European." It is known also by various other designations: some style it "Japhetic," as if it appertained to the descendants of the patriarch Japhet, as the so-called "Semitic" tongues to the descendants of Shem; "Aryan" is a yet more popular and customary name for it, but is liable to objection, as being more especially appropriate to the joint Indo-Persian branch of

the family, since it is used by them, and them alone, in designating themselves; and a few still employ the term "Indo-Germanic," which seems to savour of national prepossession, since no good reason can be given why, among the western branches, the Germanic should be singled out for representation in the general title of the family.

The languages of this whole family sustain to one another a relation which is the same in kind with that subsisting between the various Germanic dialects, and differs from it only in degree. That the signs of their relationship escape the notice of a superficial observer—that the school-boy, or even the college-student, when toiling over his Greek and Latin tasks, does not suspect, and might be hard to persuade, that the classical languages and his mother-tongue are but modified forms of the same original, is evidently no ground for discrediting the fact. The uninstructed English speaker, as we have seen, finds even the nearly kindred German as strange and unintelligible as the Turkish: both are to him in equal degree, as he says, "all Dutch," or "all Greek;" and yet, a little learning enables him to find half his native vocabulary, in a somewhat changed but still plainly recognizable form, in the German dictionary. A higher degree of instruction is required, in order to the discovery and appreciation of that evidence which proves the remoter relationship of the Indo-European tongues; a wider comparison, a more skilled and penetrating analysis, must be applied; but, by its application, the conclusion is reached just as directly and surely in the one case as in the other. The inquirer fully convinces himself that the correspondences in their material and structure are too numerous, and of too intimate a character, to be explained with any plausibility by the supposition of accidental coincidence, or of mutual borrowing or imitation; that they can only be the consequence of a common linguistic tradition.

Any complete or detailed exhibition of the evidence which shows the original unity of the languages claimed to constitute the Indo-European family is, of course, utterly impossible within the necessary limits of these lectures; but it is altogether desirable that we should direct our attention to

at least a few samples of the correspondences from which so important a truth is derived. It will be allowable to do this the more succinctly, inasmuch as the truth is one now so well established and so generally received, and of which the proof is already familiar to so many. We may fairly claim, indeed, that it is denied only by those who are ignorant of the facts and methods of linguistic reasoning, or whose judgments are blinded by preconceived opinion.

I shall not strive after originality in my selection of the correspondences which illustrate the common origin of the Indo-European tongues, but shall follow the course already many times trodden by others. This is one which is marked out by the circumstances of the case. It would be extremely easy, choosing out any two from among the languages which we wish to compare—as the Latin and Greek, the Greek and Sanskrit, the Latin and Russian, the Lithuanian and German — to draw up long lists of words common to both, out of every part of their respective vocabularies; especially, if we were to take the time and pains to enter into a discussion of the laws governing their phonetic variations, and so to point out their obscure as well as their more obvious correspondences: and we might thus satisfactorily prove them all related, by proving each one related with each of the rest in succession. When, however, we seek for words which are clearly and palpably identical in all or nearly all the branches of the family, we have to resort to certain special classes, as the numerals and the pronouns. The reason of this it is not difficult to point out. For a large portion of the objects, acts, and states, of the names for which our languages are composed, it is comparatively easy to find new designations: they offer numerous salient points for the names-giving faculty to seize upon; the characteristic qualities, the analogies with other things, which suggest and call forth synonymous or nearly synonymous titles, are many. Hence a language may originate a variety of appellations for the same thing—as, for *horse*, we have also the almost equivalent names *steed*, *nag*, *courser*, *racer*; and further, for the different kinds and conditions of the same animal, the names *stallion*, *mare*, *gelding*, *filly*, *colt*,

pony, and others—and, in the breaking up of the language into dialects, one of these synonymous appellations is liable to become the prevailing one in one dialect, another in another, to the neglect and loss of all but the one selected. Or, a new name is started in a single dialect, wins currency there, and crowds out of use its predecessors. The German, for instance, has, indeed, our word *horse*, in the form *ross* (earlier *hros*), but employs it more rarely, preferring to use instead *pferd*, a word of which we know nothing. The modern Romanic tongues, too, say in the same sense *caballo*, *cheval*, etc., words coming from the Latin *caballus*, 'nag,' and they have lost almost altogether the more usual and dignified Latin term *equus*. Thus, further, the modern French name for 'shoemaker' is *cordonnier*, literally 'worker in Cordovan leather;' for 'cheese,' *fromage*, properly 'pressed into a form, moulded;' for 'liver,' *foie*, originally 'cooked with figs'—that fruit having been, as it seems, at a certain period, the favourite garnish for dishes of liver: while the Latin appellations of these three objects have gone out of use and out of memory. But for the numerals and pronouns our languages have never shown any disposition to create a synonymy; it was, as we may truly say, no easy task for the linguistic faculty to arrive at a suitable sign for the ideas they convey; and, when the sign was once found, it maintained itself thenceforth in use everywhere, without danger of replacement by any other, of later coinage. Hence all the Indo-European nations, however widely they may be separated, and however discordant in manners and civilization, count with the same words, and use the same personal pronouns in individual address—the same, with the exception, of course, of the changes which phonetic corruption has wrought upon their forms.

For reasons not so easily explainable, the Indo-European languages show a hardly less noteworthy general accordance in regard to the terms by which, within the historical period, or down even to the present time, they indicate the degrees of near relationship, such as *father*, *mother*, *daughter*, *brother*, *sister*. Formed, as these words were, in the earliest period of history of the common mother-tongue, they have in nearly

all its branches escaped being superseded by expressions of later growth, although there is hardly one of them which does not here and there exhibit a modern substitute.

The following table will set forth, it is believed, in a plain and apprehensible manner some of the correspondences of which we have been speaking. For the sake of placing their value in a clearer light, I add under each word its equivalents in three of the languages—namely Arabic, Turkish, and Hungarian—which, though neighbours of the Indo-European tongues, or enveloped by them, are of wholly different kindred.

English	*two*	*three*	*seven*	*thou*	*me*	*mother*	*brother*	*daughter*
Germanic:								
Dutch	*twee*	*drie*	*zeven*		*mij*	*moeder*	*broeder*	*dochter*
Icelandic	*tvō*	*thriu*	*siö*	*thu*	*mik*	*modhir*	*brodhir*	*dottir*
High-German	*zwei*	*drei*	*sieben*	*du*	*mich*	*mutter*	*bruder*	*tochter*
Mœso-Gothic	*twa*	*thri*	*sibun*	*thu*	*mik*		*brothar*	*dauhtar*
Lithuanic	*du*	*tri*	*septyni*	*tu*	*manen*	*moter*	*brolis*	*dukter*
Slavonic	*dwa*	*tri*	*sedmi*	*tŭ*	*man*	*mater*	*brat*	*dochy*
Celtic	*dau*	*tri*	*secht*	*tu*	*me*	*mathair*	*brathair*	*dear* (??)
Latin	*duo*	*tres*	*septem*	*tu*	*me*	*mater*	*frater*	
Greek	*dïo*	*treis*	*hepta*	*sŭ*	*me*	*meter*	*phrater*	*thugater*
Persian	*dwa*	*thri*	*hapta*	*tum*	*me*	*matar*		
Sanskrit	*dwa*	*tri*	*sapta*	*twam*	*me*	*matar*	*bhratar*	*duhitar*
Arabic	*ithn*	*thalath*	*sab'*	*anta*	*ana*	*umm*	*akh*	*bint*
Turkish	*iki*	*üch*	*yedi*	*sen*	*ben*	*ana*	*kardash*	*kiz*
Hungarian	*ket*	*harom*	*het*	*te*	*engem*	*anya*	*fiver*	*leany*

I have selected, of course, for inclusion in this table, those words of the several classes represented which exhibit most clearly their actual unity of descent: in others, it would require some detailed discussion of phonetic relations to make the same unity appear. Thus, the Sanskrit *panca*, the Greek *pente*, the Latin *quinque*, and the Gothic *fimf*, all meaning 'five,' are as demonstrably the later metamorphoses of a single original word as are the varying forms of the primitive *tri*, 'three,' given above: each of their phonetic changes being supported by numerous analogies in the respective languages. The whole scheme of numeral and pronominal forms and of terms of relationship is substantially one and the same in all the tongues ranked as Indo-European.

These facts, of themselves, would go far toward proving the original unity of the languages in question. To look

upon correspondences like those here given as the result of accident is wholly preposterous: no sane man would think of ascribing them to such a cause. Nor is the hypothesis of a natural and inherent bond between the sound and the sense, which would prompt language-makers in different parts of the earth to assign, independently of one another, these names to these conceptions, at all more admissible. The existence of a natural bond could be claimed with even the slightest semblance of plausibility only in the case of the pronouns and the words for 'father' and 'mother;' and there, too, the claim could be readily disposed of—if, indeed, it be not already sufficiently refuted by the words from stranger tongues which are cited in the table. Mutual borrowing, too, transfer from one tongue to another, would be equally far from furnishing an acceptable explanation. Were we dealing with two or three neighbouring dialects alone, the suggestion of such a borrowing would not be so palpably futile as in the case in hand, where the facts to be explained are found in so many tongues, covering a territory which stretches from the mouths of the Ganges to the shores of the Atlantic. A modified form of the hypothesis of mutual borrowing is put forth by some who are indisposed to admit the essential oneness of Indo-European speech. Some tribe or race, they say, of higher endowments and culture, has leavened with its material and usages the tongues of all these scattered peoples, engrafting upon their original diversity an element of agreement and unity. But this theory is just as untenable as the others which we have been reviewing. Instances of mixture of languages—resulting either from the transmission of a higher and more favoured culture, or from a somewhat equal and intimate mingling of races, or from both together—have happened during the historical period in sufficient numbers to allow the linguistic student to see plainly what are its effects upon language, and that they are very different from those which make the identity of Indo-European language. The introduction of culture and knowledge, of art and science, may bring in a vocabulary of expressions for the knowledge communicated, the conceptions taught or prompted; but it cannot touch the most intimate fund of speech, the words

significant of those ideas without whose designation no spoken tongue would be worthy of the name. If we could possibly suppose that the rude ancestors of the Indo-European nations, more brutish than the Africans and Polynesians of the present day, were unable to count their fingers even until taught by some missionary tribe which went from one to the other, scattering these first rudiments of mathematical knowledge, we might attribute to its influence the close correspondence of the Indo-European numeral systems; but then we should have farther to assume that the same teachers instructed them how to address one another with *I* and *thou*, and how to name the members of their own families: and who will think of maintaining such an absurdity? All the preponderating influence of the Sanskrit-speaking tribes of northern India over the ruder population of the Dekhan, to which they gave religion, philosophy, and polity, has only resulted in filling the tongues of the south with learned Sanskrit, much as our own English is filled with learned Latin and Greek. Even that coalescence of nearly equal populations, languages, and cultures out of which has grown the tongue we speak, has, as was pointed out in the fourth of these lectures, left the language of common life among us—the nucleus of a vocabulary which the child first learns, and every English speaker uses every day, almost every hour—still overwhelmingly Saxon: the English is Germanic in its fundamental structure, though built higher and decorated in every part with Romanic material. So is it also with the Persian, in its relation to the Arabic, of whose material its more learned and artificial styles are in great part made up; so with the Turkish, of which the same thing is true with regard to the Persian and Arabic. But most of all do these cases of the mingling of different tongues in one language, and every other known case of a like character, show that the grammatical system, the apparatus of inflection and word-making, the means by which vocables, such as they stand in their order in the dictionary, are taken out and woven together into connected discourse, resists longest and most obstinately any trace of intermixture, the intrusion of foreign elements and foreign habits. However many French

nouns and verbs were admitted to full citizenship in English speech, they all had to give up in this respect their former nationality: every one of them was declined or conjugated after Germanic models. Such a thing as a language with a mixed grammatical apparatus has never come under the cognizance of linguistic students: it would be to them a monstrosity; it seems an impossibility. Now the Indo-European languages are full of the plainest and most unequivocal correspondences of grammatical structure; they show abundant traces of a common system of word-formation, of declension, of conjugation, however disguised by the corruptions and overlaid by the new developments of a later time: and these traces are, above all others, the most irrefutable evidences of the substantial unity of their linguistic tradition. We will notice but a single specimen of this kind of evidences, the most striking one, perhaps, which Indo-European grammar has to exhibit. This is the ordinary declension of the verb, in its three persons singular and plural. In drawing out the comparison, we cannot start, as before, from the English, because, as has been shown in a previous lecture (the third), the English has lost its ancient apparatus of personal endings: we must represent the whole Germanic branch by its oldest member, the Mœso-Gothic. The table is as follows: *

English	'I have'	'thou hast'	'he has'	'we have'	'ye have'	'they have'
Mœso-Gothic	*haba*	*habai-s*	*habai-th*	*haba-m*	*habai-th*	*haba-nd*
Mod. Persian	*-m*		*-d*	*-m*	*-d*	*-nd*
Celtic	*-m*		*-d*	*-m*	*-d*	*-t*
Lithuanic	*-mi*	*-si*	*-ti*	*-me*	*-te*	*-ti*
Slavonic	*-mi*	*-si*	*-ti*	*-mu*	*-te*	*-nti*
Latin	*habeo*	*habe-s*	*habe-t*	*habe-mus*	*habe-tis*	*habe-nt*
Greek	*-mi*	*-si*	*-ti*	*-mes*	*-te*	*-nti*
Sanskrit	*-mi*	*-si*	*-ti*	*-masi*	*-tha*	*-nti*

Fundamental and far-reaching as are the correspondences,

* Owing to the difficulty of finding a single verb which shall present the endings in all the different languages, the verb *to have* has been selected, and given in full in the two languages in which it occurs, the terminations alone being elsewhere written. These are not in all cases the most usual endings of conjugation, but such as are found in verbs, or in dialects, which have preserved more faithfully their primitive forms.

of material and of form, which have thus been brought forward, it is not necessary that we insist upon their competency, alone and unaided, to prove the Indo-European languages only later dialectic forms of a single original tongue. Their convincing force lies in the fact that they are selected instances, examples chosen from among a host of others, which abound in every part of the grammar and vocabulary of all the languages in question, now so plain as to strike the eye of even the hasty student, now so hidden under later peculiar growth as to be only with difficulty traceable by the acute and practised linguistic analyst. He who would know them better may find them in such works as the Comparative Grammars of Bopp and Schleicher and the Greek Etymologies of Curtius. An impartial examination of them must persuade even the most sceptical that these tongues exhibit resemblances which can be accounted for only on the supposition of a prevailing identity of linguistic tradition, such as belongs to the common descendants of one and the same mother-tongue. On the other hand, all their differences, great and widely sundering as these confessedly are, can be fully explained by the prolonged operation of the same causes which have broken up the Latin into the modern Romanic dialects, or the original Germanic tongue into its various existing forms, and which have converted the Anglo-Saxon of a thousand years ago into our present English. Besides its natural divergent growth, the original Indo-European tongue has doubtless been in some degree diversified by intermixture here and there with languages of other descent; but there is no reason for believing that this has been an element of any considerable importance in its history of development. At some period, then, in the past, and in some limited region of Europe or Asia, lived a tribe from whose imperfect dialect have descended all those rich and cultivated tongues now spoken and written by the teeming millions of Europe and of some of the fairest parts of Asia.

To know when and where this tribe lived and formed its language is unfortunately beyond our power. It is, indeed, often assumed and asserted that the original Indo-European home was in the north-eastern part of the Iranian plateau,

near the Hindu-Koh mountains; but so definite a determination possesses not the slightest shadow of authority or value. We really know next to nothing of the last movements which have brought any branch of the family into its present place of abode; even these lie beyond the reach of the very hoariest traditions which have come down to us. The daylight of recorded history dawns first upon the easternmost, the Indo-Persian or Aryan, branch. The time is probably not far from two thousand years before Christ. We there see the Sanskrit-speaking tribes but just across the threshold of India, working their way over the river-valleys and intervening sand-plains of its north-western province, the Penjab, toward the great fertile territory, watered by the Ganges and its tributaries, of which they are soon to become the masters; and we know that India, at least, is not the first home, but one of the latest conquests, of the family. The epoch, however, early as it appears to us, is far from the beginning of Indo-European migrations; the general separation of the branches had taken place long before: and who shall say which of them has wandered widest, in the search after a permanent dwelling-place? The joint home of Indians and Persians was doubtless in north-eastern Iran, the scene of the oldest Persian religious and heroic legend and tradition; but there is no evidence whatever to prove that they were the aborigines of that region, and that all migration had been westward from thence.* Greek history and tradition also penetrate a little way into the second thousand years before Christ; but the Greeks are then already in quiet possession of that little peninsula, with the neighbouring islands and Asiatic shores, whence the glory of their genius afterward irradiated the world; and, for aught that they are able to tell us of their origin, they might have sprung out of the ground there—born, according to their own story, of the stones which Deucalion and Pyrrha threw

* Some authorities incline to regard the geographical reminiscences of the Zend-avesta (in the first chapter of the Vendidad) as indicating the course of the joint Aryan migration from the original family home; but the claim appears to me so wholly baseless, and even preposterous, that I find it difficult to understand how any man should seriously put it forward.

behind them. The Latin race first appears as an insignificant handful in central Italy, crowded by other communities, in part of kindred blood; but no legend told us respecting its entrance into the Italian peninsula is of the very smallest historical value. Roman historians first bring to our knowledge the Celts and Germans. The former are already beginning to shrink and waste away within their ancient limits before the aggressions of the surrounding races: Celtic tales of the migrations westward which brought them into their European seats are but lying legends, mere echoes of their later knowledge of the countries and nations to the eastward. Germany is, from the first, the home of the Germans: they are a seething mass; south-eastward as well as south-westward rove their restless hordes, disturbing for centuries the peace of the civilized world; they leave their traces in every country of middle Europe, from the Volga to the Pillars of Hercules; but whence and when they came into Germany, we ask in vain. Last to appear upon the historic stage are the Slavonians, in nearly their present abodes: a less enterprising, but a stubborn and persistent race, whose lately acquired civilization has only within a short time begun to be aggressive. Of its own origin, it has nothing at all to say.

But if history and tradition thus refuse to aid us in searching for the Indo-European home, neither do the indications of language point us with anything like definiteness or certainty to its locality. The tongues of the easternmost branches, the Persian and Indian, do, indeed, exhibit the least departure from that form of speech which a general comparison of all the dialects shows to have been the primitive one; but this is very far from proving the peoples who speak them to have remained nearest to their primitive seats. Migration does not necessarily lead to rapidity of linguistic changes, nor does permanence of location always imply persistency of linguistic type. Thus—to refer only to two or three striking facts among the languages of this family—the Greek has preserved much more than the Armenian of that material and structure which were of earliest Indo-European development, notwithstanding the more oriental position of

the latter; of all the existing tongues of the whole great family, the Lithuanian, on the Baltic, retains by far the most antique aspect; and, among the Germanic dialects, the speech of Iceland, the latest Germanic colony, is least varied from their common type. All that primitiveness of form, in respect both to language and institutions, which characterizes the Aryan branch of the family—and especially the Indian member of the branch, in its oldest period, represented to us in the Vedas—would be fully and satisfactorily accounted for, without denying them a long history and wide migration, by attributing to them an exceptionally conservative disposition—such a disposition as so markedly distinguishes the Indian above the Persian people since their separation, making the former, in a vastly higher degree than the latter, the model and illustration of earliest Indo-European antiquity.

Nor, again, are the inter-connections of the different branches, so far as yet made out, of a nature to cast much light upon the history of their wanderings. That the separation of Indian and Persian is latest of all is, it is true, universally admitted. Nearly all agree, moreover, in allowing a like special relationship of the Greek and Latin, although its comparative remoteness, and the loss of intermediate forms, make the question one of decidedly greater doubt and difficulty. Beyond this, nothing is at present firmly established. The honour of a later and closer alliance with the Aryan or Indo-Persian branch has been confidently claimed for the classical or Greco-Latin, for the Slavonic, and for the Germanic, respectively. Within no long time past, a German scholar of high rank * has attempted to lay out a scheme of relationship for all the branches of the family. He assumes that the original stock parted first into a northern and a southern grand division: the northern included what afterward became the Germanic and the Slavo-Lithuanic branches, the latter of them dividing yet later into Slavonic and Lithuanic; the southern was broken up first into an Aryan and a southern European group, which respectively under-

* Professor August Schleicher, of Jena: his views may be found drawn out in full in the preface to his interesting work on the German language (Die Deutsche Sprache, Stuttgart, 1860).

went farther separation, the one into Persian and Indian, the other into Greek and Italo-Celtic: while the Italic, of which the Latin is the chief, and the Celtic, were the last to begin their independent history, being still more closely related than the Latin and the Greek. The feature of this arrangement which is most calculated to repel rather than attract assent is the position assigned to the Celtic languages. Few scholars are ready to allow that these tongues, in which the original and distinctive features of Indo-European speech are most of all hidden under the manifold effects of decay and new growth, whose Indo-European character was therefore the last of all to be recognized, and whose separation from the common stock has been generally looked upon as the commencement of its dispersions, are to be regarded as the nearest kindred of the Latin—although no one who remembers how greatly the rates of linguistic change vary among different peoples and under different circumstances will venture to pronounce the connection impossible. The time has not yet come for a full settlement of these controverted points; the means of their solution are, however, doubtless contained in the linguistic facts which lie within our reach, and a more thorough study and closer comparison will one day bring them to light, and may perhaps at the same time illustrate the course and order of those grand movements which have brought the various races of the family into their present seats. But that such or any other evidences will ever direct our gaze to the precise region whence the movements had their first start is in the very highest degree unlikely: and in the mean time it is better candidly to confess our ignorance than to try to hold with confidence an opinion resting upon grounds altogether insufficient and untenable. At any rate, we ought fully to acknowledge that linguistic science, as such, does not presume to decide whether the Indo-European home was in Europe or in Asia: the utmost that she does is to set up certain faint and general probabilities, which, combined with the natural conditions of soil and climate, the traditions of other races, and the direction of the grand movements of population in later times, point to

the East rather than the West as the starting-point of migration.

If the question of place must thus be left unsettled, that of time is not less uncertain. The geologist makes hitherto but lame and blundering work of establishing an absolute chronology for even the latest alterations of the earth-crust; and the student of language is compelled to found his estimates upon data not less scanty and questionable. The strata of human speech laid down in past ages have suffered most sweeping and irrestorable denudation, and their rate of growth during our present period is too greatly varying to furnish us any safe standard of general application. But to set a date lower than three thousand years before Christ for the dispersion of the Indo-European family would doubtless be altogether inadmissible; and the event is most likely to have taken place far earlier. Late discoveries are showing us that the antiquity of the human race upon the earth must be much greater than has been generally supposed. Vistas of wonderful interest are opened here, down which we can only catch glimpses; but the comparative brevity of the period covered by human records must make us modest about claiming that we shall ever understand much about ultimate beginnings, the first origin of races.

As regards, however, the grade of civilization and mode of life of the Indo-European mother-tribe before its separation into branches, the study of language is in condition to give us more definite and trustworthy information. It is evidently within our power to restore, to a certain extent, the original vocabulary of the tribe, out of the later vocabularies of the different branches. These are composed of words of every age, from the most recent to the most primitive. As the principal features of grammatical structure were struck out before the dispersion, and are yet traceable by the comparative philologist amid the host of newer formations which surround them, so was it also with the developed material of speech, with the names for such objects, and acts, and processes, and products, as the community had already found occasion, and acquired power, to express: they constituted

the linguistic patrimony with which each branch commenced its separate history, and may still be seen among the stores of more recent acquisition. Any word which is found in the possession of all or nearly all the branches is, unless there be special reasons to the contrary, to be plausibly regarded as having formed part of their common inheritance from the time of their unity. A vocabulary constructed of words thus hunted out can be, indeed, but an imperfect one, since no one can tell what proportion of the primitive tongue may have become altogether lost, or changed by phonetic corruption past possibility of recognition, in the later dialects of so many branches that its true character is no longer discoverable: but, if the list be drawn up with due skill and care, it may be depended upon as far as it goes. And as, from the stock of words composing any existing or recorded language, we can directly draw important conclusions respecting the knowledge, circumstances, and manners of the people who speak it, so we can do the same thing with the fragment of Indo-European speech which we shall have thus set up. It is obvious, too, that the results of such an investigation must be more satisfactory, the more primitive and unlettered the people respecting which it is made, the more exclusively native in origin and restricted in scope their civilization. A language like our own is an immense encyclopedia, as it were, in which are laid away the cognitions and experiences of a whole world, and of numerous generations; it is as many-sided, as cosmopolitan, as hard to grasp and interpret in detail, as is our culture; while the tongue of a rude and isolated tribe—like the Fuegians, the Fijians, the Eskimos —would be a comparatively plain and legible portraiture of its condition and character.

Some of the main results of the investigation made by means of language into the primitive state of that tribe which spoke the mother-tongue of the Indo-European family have been long since drawn out, and are already become the commonplaces of ethnological science. The subject is far from being yet exhausted, and we may look forward to much greater confidence of conclusion and definiteness of detail, when all the languages of the family shall have been more

thoroughly compared and analyzed, and especially when the establishment of a true scheme of degrees of relationship among the branches shall reduce the doubt now thrown over the primitiveness of a term by its absence from the languages of some among them.

By this kind of research, then, it is found that the primitive tribe which spoke the mother-tongue of the Indo-European family was not nomadic alone, but had settled habitations, even towns and fortified places, and addicted itself in part to the rearing of cattle, in part to the cultivation of the earth. It possessed our chief domestic animals—the horse, the ox, the sheep, the goat, and the swine, besides the dog: the bear and the wolf were foes that ravaged its flocks; the mouse and fly were already its domestic pests. The region it inhabited was a varied one, not bordering upon the ocean. The season whose name has been most persistent is the winter. Barley, and perhaps also wheat, was raised for food, and converted into meal. Mead was prepared from honey, as a cheering and inebriating drink. The use of certain metals was known; whether iron was one of them admits of question. The art of weaving was practised; wool and hemp, and possibly flax, being the materials employed. Of other branches of domestic industry, little that is definite can be said; but those already mentioned imply a variety of others as coördinate or auxiliary to them. The weapons of offence and defence were those which are usual among primitive peoples, the sword, spear, bow, and shield. Boats were manufactured, and moved by oars. Of extended and elaborate political organization no traces are discoverable: the people was doubtless a congeries of petty tribes, under chiefs and leaders, rather than kings, and with institutions of a patriarchal cast, among which the reduction to servitude of prisoners taken in war appears not to have been wanting. The structure and relations of the family are more clearly seen; names of its members, even to the second and third degrees of consanguinity and affinity, were already fixed, and were significant of affectionate regard and trustful interdependence. That woman was looked down upon, as a being in capacity and dignity inferior to man, we find no indication

whatever. The art of numeration was learned, at least up to a hundred; there is no general Indo-European word for 'thousand.' Some of the stars were noticed and named: the moon was the chief measurer of time. The religion was polytheistic, a worship of the personified powers of nature. Its rites, whatever they were, were practised without the aid of a priesthood.

Such, in briefest possible description, was the simple people from whom appear to have descended those mighty nations who have now long been the leaders of the world's civilization. Of their classification, their importance in history, and the value of their languages to linguistic science, we shall treat further in the next lecture.

LECTURE VI.

Languages and literatures of the Germanic, Slavonic, Lithuanic, Celtic, Italic, Greek, Iranian, and Indian branches of Indo-European speech. Interest of the family and its study; historical importance of the Indo-European races; their languages the basis of linguistic science. Method of linguistic research. Comparative philology. Errors of linguistic method or its application.

Our consideration of the processes of linguistic growth, and of their effects upon the condition of language and the rise of discordant tongues, was brought to a close in the preceding lecture with a brief discussion of certain erroneous views respecting original dialectic variety, and the influence exerted upon it by literary and grammatical cultivation. We then looked to see how and how far the principles which we had established could be applied to explain the seemingly infinite confusion of tongues now prevailing upon the earth, and to facilitate their classification and reduction to order. This led us to a recognition of our own language as one of a group of nearly related dialects, the Germanic group; and, on inquiring farther, we found that this was itself a member of a wider family, embracing nearly all the tongues of Europe, with a part of those of Asia, and divided into seven principal branches: namely, the Indian, the Iranian, the Greek, the Latin, the Germanic, the Slavonic (including the Lithuanic, sometimes reckoned as a separate branch), and the Celtic. We called it the Indo-European family. At some place and time, which we were obliged to confess ourselves unable to determine with any

even tolerable degree of confidence—but more probably in Asia, and certainly not less than three thousand years before Christ—and in a condition of civilization respecting which the evidence of language furnished us valuable hints, some single community had spoken a single tongue, from which all these others were descended, in accordance with the universal laws of linguistic tradition, by processes which are still active in every part of human speech. And now, waiving for a while the question whether it may not be possible to regard the great Indo-European family itself as only a member of a yet vaster family, including all or nearly all the languages of the human race, we have, in the present lecture, to review more in detail its constitution, to note the period and locality of its constituent members, to glance at the special historical importance attaching to them and to the peoples who speak them, to set forth their value as the fundamental material of linguistic science, and to examine anew and more systematically the general method of linguistic research, as established upon their study.

We may best commence our survey of the varieties of Indo-European speech with our own branch, the Germanic. Its existing dialects, as has been already pointed out, are divided into three groups or sub-branches: 1, the Low-German, occupying northern Germany and the Netherlands, with their colony Britain, and with the numerous and widely-scattered modern colonies of Britain; 2, the High-German, in central and southern Germany; 3, the Scandinavian, in Denmark, Sweden, Norway, and Iceland. Of the Low-German group, the English is by far the most important member; its eventful history, illustrated at every step by valuable literary documents, we trace back, through Middle English (A.D. 1350-1550), Old English (A.D. 1250-1350), and Semi-Saxon (A.D. 1150-1250), to the Anglo-Saxon, which reaches into the seventh century of our era, possessing an antiquity exceeded by only one other Germanic dialect. Its earliest monuments, in their style and metre, and at least one of them, the Beowulf, in subject and substance also, carry us back to the pre-Christian period of Germanic history. We cannot delay here to enter into any detailed examination

of the character and changes of English speech, interesting and instructive as such a task would be; save so far as they have been and may hereafter be brought in by way of illustration of general linguistic laws, they must be left to more special treatises.*

Next of kin with the Anglo-Saxon, or oldest form of English, are the ancient Frisian, of the northern sea-coast of Germany, which had, in the fourteenth century and later, a literature of its own, of juridical content, composed in an idiom of form little less antique than Old High-German, notwithstanding its comparatively modern date — and the Old Saxon, the principal language of northern Germany between the Rhine and the Elbe, represented to us by but a single work, the *Heliand* or 'Saviour,' a poetical life of Christ, probably of the ninth century. Both Saxon and Frisian have been almost wholly crowded out of cultivated use in modern times, as was explained in a former lecture (see p. 164), by the overpowering influence of the High German, and their domain has also been encroached upon by other dialects of the same kindred, so that they survive at present only as insignificant popular *patois*. Nothing but the political independence of Holland has saved its peculiar speech from the same fate: the literary cultivation of the Netherlandish or Dutch can be traced back to the thirteenth century, although dating chiefly from the sixteenth, the era of the country's terrible struggle against the political tyranny of Spain. The Flemish, the closely allied idiom of Flanders, has its own separate records, of about the same antiquity, but is now nearly extinct.

The history of High-German speech was succinctly sketched in connection with our inquiries into the rise and extension of literary dialects. It falls into three periods. The first period is that of the Old High-German (*Althochdeutsch*), from the eighth to the twelfth century; its monuments are tolerably abundant, but, with trifling exceptions, of Christian origin and religious content: they represent three

* See the works of Marsh, Craik, and others; and especially, for a clear and succinct view of the history and connections of English speech, with grammatical analyses and illustrative specimens, the work of Professor Hadley, already once referred to, on p. 84.

principal sub-dialects, the Frankish, the Alemannic and Swabian, and the Bavarian and Austrian. The second period, that of the Middle High-German (*Mittelhochdeutsch*), covers about four centuries, beginning with the twelfth and ending with the fifteenth; its ruling dialect is the Swabian; and its rich literature hands down to us valuable productions of the poetical fancy of the times, in the lyric verses of the Minnesingers, and precious memorials of ancient German national tradition, in the heroic legends (*Heldensagen*). The foremost work of the latter class, the Lay of the Nibelungen (*Nibelungenlied*), is one of the noblest epics which any country has produced, in any age of the world. Of the language and literature of the New High-German period, from early in the sixteenth century to our own times—the "German" language and literature, as we are accustomed to call it—there is no need that I speak more particularly.

The third subdivision of the Germanic branch is the Scandinavian. Its earliest monuments come to us from Iceland, that far-off and inhospitable island of volcanoes, boiling springs, and ice-fields, which, settled in the ninth century by refugees from Norway, long continued a free colony, a home of literary culture and legendary song. Christianity, more tolerant there than elsewhere on Germanic soil, did not sweep from existence the records of ancient religion and customs. The two Eddas, gathered or preserved to us from the twelfth and thirteenth centuries, are, in virtue of their tone and content, by far the most primitive works in the whole circle of the Germanic literatures, documents of priceless value for the antiquity of the Germanic race. Their language also, though of so much more recent date than the oldest Anglo-Saxon and High-German, is not exceeded by either in respect to the primitiveness of its phonetic and grammatical form. Nor has it greatly changed during the six or seven centuries which have elapsed since the compilation of the Eddas. The modern Icelandic is still, among all the existing Germanic tongues, the one that has preserved and possesses the most of that original structure which once belonged to them all alike. Three other dialects, the Norwegian, the Swedish, and the Danish, constitute along with it the Scandinavian

group, and are languages of literary culture. They are not direct descendants of the "Old Norse" tongue, as the ancient Icelandic is usually called: the Norwegian comes nearest to being so; the others represent more ancient dialectic divisions of Scandinavian speech.

How many other Germanic branches, originally coördinate with the three we have described, once had existence, but have become extinct in later times, by the extinction of the communities who spoke them, we have not, nor shall we ever have, any means of knowing. But of one such, at least, most precious remains have escaped the general destruction of the nationality to which it belonged. One portion of the western division of the great and famous Gothic nation crossed the lower Danube, some time in the early part of the fourth century, and settled in the Roman province of Mœsia, as subjects of the empire and as Christians. For them, their bishop and leader, Ulfilas, later in the same century, made a translation into their own vernacular of nearly the whole Bible, writing it in an alphabet of his own devising, founded on the Greek. Five hundred years afterward, the Gothic was everywhere an extinct tongue; but considerable portions of the Gothic Scriptures—namely, a part of the Gospels, Paul's epistles nearly complete, and fragments of the Old Testament—are happily still preserved, in a single manuscript of the fifth century, now at Upsala, in Sweden. Scanty as these relics may be, they are of inestimable value in illustrating the history of the whole Germanic branch of Indo-European language, and bridging over the distance which separates it from the other branches. For, as in time, so still more notably in material and structure, their idiom is much the most ancient of all the varied forms of Germanic speech: it is not, indeed, the mother of the rest, nor of any among them; but it is their eldest sister, and fully entitled to claim the place of head of their family.

The Slavonian branch—to which, on account of its local vicinity, as well as its probable nearer relationship, to the Germanic, we next turn our attention—need not occupy us long. It is of much less interest to us, because of its greater remoteness from our race and from our knowledge, its inferior

historical importance and literary value, and its more modern appearance.* The oldest of its dialects in date, and, in nearly all respects, the most primitive in form, is the language of the ancient Bulgarians, into which their apostle Cyril translated the Scriptures, now just about a thousand years ago. It is a curious coincidence that our knowledge of both Germanic and Slavonic speech thus begins, like that of many a rude and hitherto unlettered dialect in the hands of missionaries at the present day, with a Bible version, and at nearly the same geographical locality; the kingdom of the Bulgarians having followed that of the Goths on the southern bank of the lower Danube. But this ancient idiom—from which the modern Bulgarian differs greatly, having changed with unusual rapidity in the interval—is more commonly called the Old Slavonic, or the Church Slavic, having been adopted by a large part of the Slavonian races as their sacred language, and being still employed as such, within the ecclesiastical limits of the Greek Church. It belongs to what is known as the south-eastern section of the Slavonic branch. By far the most important of the other languages in the same section is the Russian, in its two divisions, the Russian proper and the Little-Russian, or Ruthenian. The Russian is in our day a literary language of considerable importance; its forms are traceable, in scanty documents, back into the eleventh century. In its cultivated development, it has been strongly influenced by the Church Slavonic. The south-eastern section further includes the Servian, with its closely related dialect, the Kroatian, and the Slovenian of Carinthia and Styria. Specimens of these tongues are as old as the tenth, or even the ninth, century. The Servian has an interesting modern literature of popular songs.

To the other section, the western, belong the Polish, the Bohemian with the related Moravian and Slovakian, the upper and lower Sorbian, and the Polabian, on the Elbe. Of these, the Bohemian is the oldest, having monuments probably of the tenth century. Polish literature begins in the four-

* In sketching the relations of the Slavonic languages, I follow the authority of Professor August Schleicher, in the Beiträge zur Vergleichenden Sprachforschung, vol. i., p. 1 *seq.*

teenth century, since, down to that time, the cultivated of the nation had written wholly in Latin. The others can show nothing older than the sixteenth century, and are of little consequence in any aspect.

The Lithuanic or Lettic group of dialects is sometimes treated as a subdivision of the Slavonic, and sometimes—perhaps with better reason—as a separate branch, coördinate with the other, although very closely related to it. It is of very slight historical or literary importance: its interest lies chiefly in the fact that, under the operation of causes in its history which are yet unexplained and probably unexplainable, it has preserved many of the original forms of Indo-European speech in a more uncorrupted condition than any other known dialect of the whole family which is not as much as two thousand years older. It is composed of only three dialects, one of which, the Old Prussian, the original language of the inhabitants of north-eastern Prussia, has been extinct for two hundred years, crowded out of existence by the Low-German, and leaving behind, as its only monument, a brief catechism. The other two, the Lithuanian and the Lettish, or Livonian, are still spoken by a million or two of people in the Russian and Prussian provinces bordering on the Baltic, but seem destined to give way helplessly before the encroachments of the German and Russian, and to share one day the fate of their sister-dialect. The oldest Lithuanian document dates from the middle of the sixteenth century. The southern or High Lithuanian is of most antique form; the Low Lithuanian, and yet more notably the Lettish to the north, show a less remarkable conservation of ancient material.

The Celtic languages, as was pointed out in the last lecture, have been well-nigh extinguished by the Romanic and Germanic tongues, and now only lurk in the remotest and most inaccessible corners of the wide territory which they once occupied in Europe. The Scotch Highlands, the wildest parts of Ireland, the Isle of Man, the mountains of Wales, the rough glens of Cornwall, and the land lying nearest to Cornwall across the British Channel, the promontory of Brittany, are the only regions where, for many centuries

past, Celtic speech has been heard. The Cornish, too, has become extinct within the memory of the present generation; the Irish is rapidly on its way to the same fate; the Gaelic will not survive the complete taming and civilization of the Highlands; the French is likely to crowd out the *patois* of the Breton peasant; and it is greatly to be doubted whether even the Welsh people, passionate as is the attachment with which at present they cling to their peculiar speech, will continue always to refuse the advantages that would accrue to them from its relinquishment, and a more thorough fusion with the greater community of speakers of English to which they form an adjunct. There has never been a homogeneous, independent, and cultivated Celtic state, capable of protecting its idiom from the encroachment of other tongues; and only such protection, now unattainable, can, as it seems, save Celtic speech from utter extinction.

There is no small difficulty in treating satisfactorily the documents which illustrate the history of the Celtic languages, owing to the prevalence of a peculiar and strongly-marked linguistic disease, well known among philologists as "Celtomania," which has been very apt to attack students of the subject—especially such as were of Celtic extraction, but in some degree foreigners also—leading them wildly to exaggerate the antiquity and importance of the Celtic civilization, language, and literature. We have had Celtic set up as the most primitive and uncorrupted of tongues, spoken by generations long anterior to the oldest worthies whom history, sacred or profane, recognizes, and furnishing the only sure foundation to universal etymology; we have had ancient inscriptions and difficult texts, of the most diverse origin and distant locality, explained out of Celtic into high-sounding phrases, of true Ossianic ring; we have had the obscure words of various languages traced to Celtic roots, provided with genealogies from an Irish or Welsh ancestor—and much more of the same sort. Sober and unprejudiced inquiry cuts down these claims to greatly reduced, though still respectable, dimensions.

So completely were the Gaulish dialects of northern Italy, France, and Spain wiped out by the Latin, so few traces of

them are left to us, either in the later idioms of the Latin or in fragments of writings, inscriptions, and coins, that it is still a matter of doubt and question among Celtic scholars to which of the known divisions of Celtic speech, the Gadhelic or the Cymric, they belonged, or whether they did not constitute a third division, coördinate with these. Aside from the exceedingly scanty and obscure Gallic epigraphical monuments, and the few single words preserved in classic authors, the earliest records, both of Irish and Welsh speech, are glosses, or interlinear and marginal versions and comments, written by Celtic scholars upon manuscripts which they were studying, in old times when Wales and Ireland, especially the latter, were centres of a lively literary and Christian activity. Of these glosses, the Irish are by far the most abundant, and afford a tolerably distinct idea of what the language was at about the end of the eighth century. There is also an independent literary work, a life of Saint Patrick, which is supposed to belong to the beginning of the ninth century. The other principal Gadhelic dialect, the Scotch Gaelic, presents us a few songs that claim to be of the sixteenth century. The Ossianic poems, which excited such attention a hundred years ago, and whose genuineness and value have been the subject of so lively discussion, are probably built upon only a narrow foundation of real Gaelic tradition.

In the Cymric division, the Welsh glosses, just referred to, are the oldest monuments of definite date. Though hardly, if at all, less ancient than the Irish, coming down from somewhere between the eighth and the tenth centuries, they are very much more scanty in amount, hardly sufficient to do more than disprove the supposed antiquity of the earliest monuments of the language that possess a proper literary character. For long centuries past, the Welsh bards have sung in spirit-stirring strains the glories and the woes of their race; and it is claimed that during much more than a thousand years, or ever since the sixth century, the era of Saxon invasion and conquest, some of their songs have been handed down from generation to generation, by a careful and uninterrupted tradition. And the claim is probably well

founded: only it is also pretty certain that, as they have been handed down, they have been modernized in diction, so that, in their present form, they represent to us the Welsh language of a time not much preceding the date of the oldest manuscripts, or of the twelfth to the fourteenth centuries. The later Welsh literature, as well as the Irish, is abundant in quantity. The Cornish, also, has a tolerably copious literature of not far from the same age; its earliest monument, a Latin-Cornish vocabulary, may be as old as the twelfth century. The language of Brittany, the Armorican —which is so closely allied with the two last-mentioned that it cannot well be regarded as a remnant and representative of the Celtic dialects of Gaul, but must rather belong to colonists or fugitives from Britain—is recorded in one or two brief works going back to the fourteenth century, or even farther.

We come next to the Romanic branch, as we have called it when briefly noticing its history at an earlier point in our discussions. Of the languages which compose it, and whose separate currents of linguistic tradition we trace backward until they converge and meet in the Latin, two, the Rhæto-Romanic in southern Switzerland and at the head of the Adriatic, and the Wallachian of the northern provinces of Turkey, have no literature of any antiquity or independent value. The other five—the Italian, French, Provençal, Spanish, and Portuguese—all emerged out of the condition of vulgar *patois*, and began to take on the character of national cultivated languages, at not far from the same time, or in the eleventh, twelfth, and thirteenth centuries. There are fragments of French texts dating from the tenth century, but the early French literature, abundant and various, and, in its romances, attaining a wonderfully sudden and general popularity throughout cultivated Europe, belongs to the twelfth and thirteenth centuries. The Provençal poetry, consisting of the songs of the *troubadours*, whose chief activity was displayed at the court of Toulouse, in southernmost France, was wholly lyrical in form, and amatory or satirical in content: it finished its brilliant but brief career, of about three hundred years, in the fourteenth century. The

culture of Italian begins at the court of Frederic II., about A.D. 1200, and within a century and a half of that time lived, sang, and narrated the three greatest writers of Italy—Dante (ob. 1321), Petrarch (ob. 1374), and Boccaccio (ob. 1375). The Spanish heroic legend commences in the twelfth century; and there are monuments of Portuguese speech of about the same time. Among these languages, the French is that which has undergone most change during the historical period; the oldest French and Provençal form a kind of middle term between the modern language and the ancient Latin, illustrating the transition from the latter to the former.

But if we have called the branch of Indo-European speech to which these tongues belong the Romanic, we have done so out of regard to its later history and present constitution, and not altogether properly. To the student of Indo-European philology, these are the recent branchings of a single known stock, the Latin; to trace their development is a task of the highest interest, a whole linguistic school in itself; they furnish rich and abundant illustration of all the processes of linguistic growth: but, as regards any direct bearing upon the history of Indo-European speech, they have value only through the Latin, their common parent. The remoter relations of the Latin itself receive light from various sources. In its familiar classic form, it represents to us the speech of the learned and educated Romans of a century or two before the Christian era; it is somewhat refined by literary culture from the diction of the oldest authors whose works have come down to us, in fragments or entire—as Livius Andronicus, Plautus, Terence—and is far more notably changed from the language of earlier Roman times—as is shown by the yet extant monuments, like the inscription on the Duilian column (about B.C. 260), that on the sarcophagus of a founder of the Scipio family (a little older than the last mentioned), and especially the Salian hymn and song of the *fratres arvales*, of yet earlier but uncertain date, in which the best Latin scholar would find himself wholly at fault without the traditional interpretation which is handed down along with them: in these monuments is preserved to us

many an antique form, giving valuable hints respecting the grammatical and phonetic development of the language. Their evidence is supplemented in a very important manner by that of other kindred Italian dialects. The Oscan or Opican of southern Italy was the language of the Samnites and their allies, from whose hands Rome wrung after a severe and often doubtful struggle the dominion of the peninsula: it was not disused as the official speech of some of the southern provinces until less than a hundred years before Christ; and coins and inscriptions dating from the two or three preceding centuries still teach us something of its structure and character. The Umbrian, the tongue of north-eastern Italy, is yet more fully represented to us by the Euguvine tablets, inscribed with the prayers and ceremonial rules of a fraternity of priests, and supposed to be as old as the third and fourth centuries before our era. Of the Volscian dialect, also, and the Sabine or Sabellian—the former being more akin with the Umbrian, the latter with the Latin—some exceedingly scanty relics have been discovered. The interpretation and comprehension of all these—resting, as it does, solely upon comparison with the Latin and other more distantly related tongues—is at present, and is likely always to remain, incomplete and doubtful; but they are of essential importance, both in explaining some of the peculiarities of the Latin, and in fixing its position as one of a group of kindred dialects occupying the greater portion of the Italian peninsula, and hence most suitably to be denominated the Italic group. The theory that the Latin was produced by a mixture of somewhat discordant elements—of Roman, Sabine, and Oscan; or of these and Etruscan—brought together by historical circumstances, and finally fused into homogeneousness, is one which belonged to a former stage of linguistic science, and is now rejected as uncalled-for and groundless. Yet more untenable, and wanting even a semblance of foundation, is the derivation of Latin from Greek, a favourite dogma of times not long past, but at present abandoned by every comparative philologist whose opinion is of the slightest value.

In the Greek language, we reach an antiquity in the

recorded history of Indo-European speech considerably higher than we have anywhere else attained. The exact date of its earliest monuments, the grand and unrivalled poems of Homer, the Iliad and Odyssey, cannot, it is true, be determined; but they go back, doubtless, to near the beginning of the thousand years before Christ's birth. From the different parts of Greece, too, as of Italy, we have received records of dialects that subsisted side by side through all the earlier periods of the country's history, until at length (about B.C. 300) the political importance and superior literature of Athens made her idiom, the later Attic, the common language of cultivated Greeks everywhere. The earlier Attic is found first in the writings of the great dramatists, beginning about five centuries before Christ: it is more nearly akin with the earlier Ionic of Homer and Hesiod (before 700 B.C.), and the later Ionic of Herodotus (about 400 B.C.), than with the Doric of Alcman, Pindar, and Theocritus (600-250 B.C.), or the Æolic of Alcæus and Sappho (about 600 B.C.). The differences of the Greek dialects are quite insignificant as compared with those of the Italic, yet they are of no small service to the historical student of the Greek language, since each brings to his knowledge some elements less corrupted and modernized than are to be found in the others, or in the later common tongue.

The modern Greek has also its dialects, respecting which little is known in detail; and it has, besides, its common tongue, the Romaic (as it is ordinarily styled), spoken and written by all the educated Greeks of the present day. This Romaic is very much less altered from the ancient classic language, as spoken by Plato and Demosthenes, than are the modern Romanic languages from the speech of Virgil and Cicero. The difference of the two is even so slight that a party in Greece are now engaged in making the somewhat pedantic and utopian effort to eliminate it altogether, to make the turbulent population of the present petty and insignificant kingdom talk and write as did their heroic forefathers, when, though feeble in numbers, they were the foremost community of the world. Small result is to be looked for from this experiment; should it prove successful, it will

be the first time that such a thing has been accomplished in all the history of language.

Of the Asiatic branches of our family, the one which lies nearest us, the Iranian, or Persian, may first engage our attention. Its oldest monuments of well-determined date are the inscriptions—cut on the surface of immense walls of living rock, in the so-called cuneiform characters—by which the Achæmenidan sovereigns of Persia, Darius, Xerxes, and their successors, made imperishable record for posterity of their names and deeds. Fifty years ago, these inscriptions were an unsolved and apparently insoluble enigma; now, by a miracle of human ingenuity and patience, not without the aid of a combination of favouring circumstances wholly impossible at any earlier period, almost every word and every character is fully laid open to our comprehension, and they have been made to yield results of great value both to linguistic and to national history. The oldest of them come from a time about five centuries before Christ, and their extent is sufficient to give us a very distinct idea of the language of those Persians against whom the Greeks so long fought, first for independence, then for empire.

Of about the same age, and even, probably, in part considerably older, are the sacred Scriptures of the religion established by Zoroaster (in his own tongue, *Zarathustra*)—the book called the Avesta, or Zend-Avesta. The dialect in which these writings are composed goes usually by the name of the Zend; it is also styled the Avestan, and sometimes the Old Bactrian, from the country Bactria, the north-easternmost region of the great Iranian territory, which is supposed to have been its specific locality. They have been preserved to us by the Parsis of western India, who fled thither from their native country after its reduction under Mohammedan vassalage in the seventh century of our era, and who have ever since faithfully maintained, under Hindu and British protection, the rites of the Magian faith, the pure worship of Ormuzd (*Ahura-Mazda*, 'the mighty spirit') through the symbol of fire. The Avesta shows two dialects, a younger and an older; some of its hymns and prayers possibly go back to the time of Zoroaster himself—whatever that may

have been: it was doubtless more than a thousand years, at least, before Christ—but the bulk of the work is considerably later. Accompanying the Avesta is a version of it, made for the use of the priests, in another and much more modern Iranian dialect, the Pehlevi or Huzvaresh, supposed to have been the literary language of the westernmost provinces of Iran at a period some centuries later than the Christian era, and much mixed with materials derived from the Semitic tongues lying next westward, across the border. A few inscriptions and legends of coins, of the early Sassanian monarchs (after A.D. 226), furnish further specimens of the same or a nearly kindred dialect.

The general body of religious literature belonging to the Parsis of India contains tolerably copious documents of a somewhat younger and much purer Iranian dialect, usually styled the Parsi (sometimes also the Pazend). It comes, without much question, from a more eastern locality than the Pehlevi, and from a time nearly approaching that of the Mohammedan conquest. Finally, after the conquest, and when Persia was thoroughly made over into a province of the Moslem empire, arises, in the tenth century, the modern Persian, and becomes during several centuries, and even to our own day, the vehicle of an abundant and admirable literature, rich in every department, in poetry, fiction, history, philosophy, science. Its first great work, and almost or quite the greatest it has to offer us, is the Shah-Nameh, 'Book of Kings,' of Firdusi (ob. 1020), a true national epic, grand in extent, noble in style, varied in contents, in which is summed up and related at length the history of the land, traditional, legendary, and mythological, as it lay in the minds of the generation by whom was revived the ancient independence and glory of the Persian nationality. For the impoverishment of its grammar by the loss of ancient forms, the modern Persian is almost comparable with the English. It is more nearly related to the language of the Achæmenidan inscriptions than to that of the Avesta, although not the lineal descendant and representative of either. In its later literary use, it is greatly disfigured by the unlimited introduction of words from the Arabic vocabulary.

There are several other languages, in regions bordering on or included within the Iranian territory, which stand in such relations with those we have been describing as to be ranked in the same class, although their Iranian attributes are greatly obscured by the changes which have passed upon them since their separation from the principal stock. By far the most important of these is the Armenian, with an abundant literature going back to the fifth century, the era of the Christianization of the Armenian people. Others are the Ossetic, in the Caucasus; the Kurdish, the dialect of the wild mountaineers of the border lands between Persia, Turkey, and Russia; and the Afghan or Pushto, which in very recent times has enjoyed a certain degree of literary cultivation.

We come, finally, to that member of our family which has lived its life within the borders of India. Not all the numerous dialects which fill this immense peninsula, between the impassable wall of the Himalayas and the Indian ocean, own kindred with the Indo-European tongues, but only those of its northern portion, of Hindustan proper, ranging from the Indus to the mouths of the Ganges, together with a certain extent of the sea-coast and its neighbourhood stretching southward on either side. The central mountainous region and the table-lands of the Dekhan yet belong to the aboriginal tribes, who in the north were crowded out or subjugated, at a period lying only just beyond the ken of recorded history, by the Indo-European races, as they intruded themselves through the avenue, the passes on the north-western frontier, by which the conquerors of India have in all ages found entrance. The principal modern dialects of our kindred are the Hindi, Bengali, and Mahratta, each with various subdivisions, and each with a literature of its own, running back only a few centuries. The Hindustani, or Urdu, is a form of the Hindi which grew up in the camps (*ûrdû*) of the Mohammedan conquerors of India, since the eleventh century, as medium of communication between them and the subject population of central Hindustan, more corrupted in form, and filled with Persian and Arabic words —being thus, as it were, the English of India: it has enjoyed more literary cultivation than any other of the recent dialects,

and is the *lingua franca*, the official language and means of general intercourse, throughout nearly the whole peninsula. The tongue of the roving Gypsies all over Europe, though everywhere strongly tinged with the local idiom of the region of their wanderings, is in its main structure and material a modern Hindu *patois*: the Gypsies are exiles from India.

Next older than the languages we have mentioned are the Prakrit and the Pali, represented by a literature and inscriptions which come to us in part from before the Christian era. The Pali is the sacred language of the Buddhist religion in the countries lying eastward and south-eastward from India. The Prakrit dialects are chiefly preserved in the Sanskrit dramas, where the unlearned characters, the women, servants, and the like, talk Prakrit—just as, in a modern German theatre, one may hear the lower personages talk the dialects of their own districts, while the higher employ the literary German, the common speech of the educated throughout the country.

The virtual mother of all these dialects is the Sanskrit. For the last twenty-five centuries, at least, the Sanskrit has been no longer a proper vernacular language, but kept artificially in life, as the sacred dialect of Brahmanism and the cultivated tongue of literature and learning; thus occupying a position closely analogous with that held by the Latin since the decline of the western empire, as the language of Roman Catholicism, and the means of communication among the learned of all Europe. It is still taught in the schools of the Brahmanic priesthood, used in the ceremonies of their religion, and spoken and written by their foremost scholars —although, like the Latin in more recent times, much shaken in its sway by the uprise of the modern cultivated dialects, and the decadence of the religion with whose uses it is identified. We possess it in two somewhat varying forms, the classical Sanskrit, and the older idiom of the so-called Vedas, the Bible of the Hindu faith. The former is more altered, by elaborate and long-continued literary and grammatical training, from the condition of a true vernacular, than is almost any other known literary language. Partly for this reason, and partly because, at the time of its establish-

ment and fixation as the learned tongue of all Aryan India, it must have been one among a number of somewhat differing local varieties of Aryan speech, whose differences form a part of the discordance of the later dialects, I have called it above rather their virtual than their actual progenitor: it represents very closely the primitive stock out of which they have all grown, by varying internal development, and by varying influence and admixture of foreign tongues. When and where it was at first a spoken dialect, is out of our power to determine; but it cannot well be regarded as of less age than the earliest Greek records; and it is probably older by centuries. It possesses a most abundant literature, in nearly every department save history; its religious and ethical poetry, its epics, its lyric flights, its dramas, its systems of philosophy and grammar, have been found worthy of high admiration and of profound study by Western scholars; they have even been ranked by some, though very unjustly, as superior to the masterpieces of the Greek and Latin literatures. To fix the chronology of its separate works is a task of the extremest difficulty; but some of them, even in their present form, and the substance of many others, certainly come from a time considerably anterior to the Christian era.

The Vedic dialect is yet more ancient; the earliest portions of the oldest collection, the Rig-Veda ('Veda of hymns'), must, it is believed, date from nearly or quite two thousand years before Christ. The considerations from which this age is deduced for them are of a general and inexact character, yet tolerably clear in their indications. Thus, for example, the hymns of the Vedas were chiefly composed on the banks of the Indus and its tributaries, when the great valley of the Ganges was as yet unknown to the Aryan immigrants; and they present the elephant as still a wondered-at and little-known animal: while the earliest tidings of India which we have from without show us great kingdoms on the Ganges, and the elephant reduced to the service of man, both in war and in peace. Buddhism, too, which is well known to have preceded by several centuries the birth of Christ, was a revolt against the oppressive domination of the Brahmanic

hierarchy; and in the Vedas are to be seen only the germs of Brahmanism, not yet developed: no hierarchy, no system of castes, no vestige of the doctrine of transmigration. The conclusions drawn from a study of the internal history and connection of the different classes of works composing the sacred literature of India—which follow one another, in a close succession of expositions, rules, and comments, from a time not much later than that of the more recent hymns down to the historical period—point also to the same age. The Vedas are thus by not less than a thousand years the earliest documents for the history of Indo-European language—for the history, moreover, of Indo-European conditions and institutions. The civil constitution, the religious rites, the mythologic fancies, the manners and customs, which they depict, have a peculiarly original and primitive aspect, seeming to exhibit a far nearer likeness to what once belonged to the whole Indo-European family than is anywhere else to be attained. The Vedas appear rather like an Indo-European than an Indian record; they are the property rather of the whole family than of a single branch.

Much of the same character appertains to the classical Sanskrit: it is both earlier in chronologic period and more primitive in internal character than any other language of the whole great family. Its peculiar value lies in its special conservation of primitive material and forms, in the transparency of its structure, in its degree of freedom from the corrupting and disguising effects of phonetic change, from obliteration of original meaning and application. We must beware of supposing that at all points, in every item of structure, it is the superior of the other Indo-European tongues, or that it constitutes an infallible norm by which their material is to be judged; on the contrary, each of the other branches here and there excels it, offering some remains of early Indo-European speech which it has lost; but to it must be freely conceded the merit of having retained, out of the common stock, more than any one among them, almost more than they all. Exaggerated and unfounded claims are often put forward in its behalf by those who do not fully understand the true sources of its value: its

alphabet, though rich and very harmoniously developed, does not cover more than about two-thirds of our English system of spoken sounds; as an instrument of the expression of thought it has very serious and conspicuous defects, being inferior—especially in its handling of the verb (the soul of the sentence), in a loose and bald syntactical arrangement, and in an excessive use of compounds—not only to the Greek, but to almost every other cultivated Indo-European tongue; nor (as has been already hinted) can its literature sustain a moment's comparison with those of the classical languages. It is to be prized chiefly as a historical document, casting inestimable light upon the earliest development of the common speech of the Indo-European family, and the relations of its members. Had all its literature besides perished, leaving us only a grammar of its forms and a dictionary of its material, it would still in a great measure retain this character; were but a fragment of one of its texts saved, as has been the case with the Mœso-Gothic, it would still vindicate its right to a place at the head of all the languages of the family. It may easily be appreciated, then, what an impulse to the historical study of language, then just struggling into existence by the comparison of the tongues of Europe, was given by the discovery and investigation of this new dialect, having a structure that so invited and facilitated historic analysis, and even presented by the native grammatical science in an analyzed condition, with roots, themes, and affixes carefully separated, distinctly catalogued, and defined in meaning and office. In all researches into the beginnings of Indo-European speech, the genesis of roots and forms, its assistance is indispensable, and its authority of greatest weight. It often has been and still is wrongly estimated and misapplied by incautious or ill-instructed investigators; it is sometimes treated as if it were the mother of the Indo-European dialects, as the Latin of the modern Romanic tongues, instead of merely their eldest sister, like the Mœso-Gothic among the Germanic languages; it is unduly brought in to aid the inter-comparison of dialects of a single branch, and its peculiar developments, its special laws of euphony or construction, are sought to be forced upon

them; the facts it presents are erroneously accepted as ultimate, cutting off further inquiry; portions of its existing material which are of modern growth, or the artificial productions of Hindu scholasticism, are perversely used as of avail for Indo-European etymology: and such abuse has naturally provoked from some scholars a distrust of its genuine claims to regard: but, stripping off all exaggerations, and making all due allowances, the Sanskrit is still the mainstay of Indo-European philology; it gave the science a rapid development which nothing else could have given; it imparted to its conclusions a fulness and certainty which would have been otherwise unattainable.

Such is the constitution of the grand division of human speech to which our own language belongs. That its limits have been everywhere traced with entire exactness cannot, of course, be claimed; other existing dialects may yet make good their claim to be included in it—and it is beyond all reasonable question that, as many of its sub-branches have perished without leaving a record, so various of its branches, fully coördinate with those we have reviewed, must have met a like fate. We may now proceed to glance briefly at some of the grounds of the preëminent importance with which it is invested.

One source of the special interest which we feel in the study of Indo-European language lies in the fact that our own tongue is one of its branches. In the moral and intellectual world, not less than in the physical, everything cannot but appear larger in our eyes according as it is nearer to us. This would be a valid consideration with any race upon earth, since, for each, its own means of communication and instrument of thought is also the record of its past history, and must be its agency of future improvement in culture, and therefore calls for more study in order to its fuller comprehension, and its development and elevation, than should be given to any other tongue, of however superior intrinsic value. But we are further justified in our somewhat exclusive interest by the position which our languages, and the races which speak them, hold among other languages and races. It is true, as was claimed at the outset of these lectures, that linguistic

science, as a branch of human history, aims at universality, and finds the tongues of the humblest tribes as essential to her completeness as those of the most cultivated and gifted nations; but it is also true that, mindful of proportion, she passes more lightly over the one, to give her longer and more engrossed attention to the other. While the weal and woe of every individual that ever lived goes to make up the sum of human interests, with which our human nature both justifies and demands our sympathy, we cannot but linger longest and with keenest participation over the fortunes of those who have played a great part among their fellows, whose deeds and words have had a wide and deep-reaching influence. And this is, in a very marked degree, the character of the Indo-European race. Its first entrance as an actor into what we are accustomed to call universal history, or that drama of action and influence whose *denouement* is the culture of the modern European nations, was in the far East, in the Persian empire of Cyrus and his successors. This founded itself upon the ruins and relics of more ancient empires and cultures, belonging to other peoples, in part Semitic, in part of obscurer kindred. For the Indo-Europeans were, of all the great civilizing and governing races, the last to commence their career. Not only in Mesopotamia, but also in Egypt and China, the light of knowledge burned brightly, and great deeds were done, whereof the world will never lose the memory, while the tribes of our kindred were wandering savages, or weak and insignificant communities, struggling for existence. The Persian empire, in its conquering march westward, was first checked by one of these humble communities, the little jarring confederation of Greek states and cities, destined to become, notwithstanding its scanty numbers, the real founder of Indo-European preëminence. Greece, enriching itself with elements drawn from the decaying institutions of older races, assimilated them, and made them lively and life-giving, with an energy of genius unrivalled elsewhere in the annals of the world. The wider the range of our historical study, the more are we penetrated with the transcendent ability of the Greek race. In art, literature, and science, it has been what the Hebrew

race has been in religion, and its influence has been hardly less unlimited, in space and in time.

It seemed at one period, as is well known, that Greece would succeed to the imperial throne of Persia, subjecting the civilized world to her sway; but the prospect lasted but for a moment: the sceptre of universal dominion slipped from the hands of Alexander's successors, and soon passed over into the keeping of another and younger branch of the same family. Rome, appropriating the fruits of Greek culture, and adding an organizing and assimilating force peculiarly her own, went forth to give laws to all nations, and to impose upon them a unity of civilization and of social and political institutions. And if Christianity was of Semitic birth, Greeks and Romans gave it universality. Rejected by the race which should have especially cherished it, it was taken up and propagated by the Indo-Europeans, and added a new unity, a religious one, to the forces by which Rome bound together the interests and fates of mankind.

Now came the turn of yet another branch, the Germanic. This had, indeed, only the subordinate part to play of aiding in the downfall of the old order of things, and preparing the way for a new and more vigorous growth. Its tribes ravaged Europe from east to west, and even to the farthest southern coasts, giving ruling class and monarch to nearly every country of the continent. But centuries of weakness and confusion were the first result of this great up-turning, and it even appeared for a time as if the dominion of the world were destined to be usurped by another race. The Semites, inspired with the furious zeal of a new religion, Mohammedanism, broke from their deserts and overran the fairest parts of Asia and Africa; and their conquering hosts entered Europe at either extremity, establishing themselves firmly, and pushing forward to take possession of the rest. They recoiled, at last, before the reviving might of the superior race, and the last and grandest era of Indo-European supremacy began, the era in the midst of which we now live. For the past few centuries, the European nations have stood foremost, without a rival, in the world's history.

They are the enlightened and the enlighteners of mankind. They alone are extending the sphere of human knowledge, investigating the nature of matter and of mind, and tracing out their exhibition in the past history and present condition of the earth and its inhabitants. They alone have a surplus stock of intelligent energy, which is constantly pushing beyond its old boundaries, and spurns all limit to its action. The network of their activity embraces the globe; their ships are in every sea between the poles, for exploration, for trade, or for conquest; the weaker races are learning their civilization, falling under their authority, or perishing off the face of the land, from inherent inability to stand before them. They have appropriated, and converted into outlying provinces of their race and culture, the twin world of the West, and the insular continent of the south-eastern seas, while their lesser colonies dot the whole surface of the inhabitable globe. They have inherited from its ancient possessors the sceptre of universal dominion, over a world vastly enlarged beyond that to which were limited the knowledge and the power of former times: and they are worthy to wield it, since their sway brings, upon the whole, physical well-being, knowledge, morality, and religion to those over whom it is extended.

All that speciality of interest, then, which cleaves to historical investigations respecting the origin, the earliest conditions, the migrations, the mutual intercourse and influence, and the intercourse with outside races, of that division of mankind which has shown itself as the most gifted, as possessing the highest character and fulfilling the noblest destiny, among all who have peopled the earth since the first dawn of time, belongs, of right and of necessity, to Indo-European philology.

It may, indeed, be urged that this is an interest lying somewhat apart from the strict domain of linguistic science, whose prime concern is with speech itself, not with the characters or acts of those who speak. Yet, as was pointed out in our first lecture, the study of language is not introspective merely; they would unduly narrow its sphere and restrict its scope who should limit it to the examination of

linguistic facts: these are so inextricably intertwined with historical facts, so dependent upon and developed out of them, that the two cannot be separated in consideration and treatment; one chief department of the value of the science lies in its capacity to throw light upon the history of human races. The importance of the Indo-European races in history is, then, legitimately to be included among the titles of Indo-European philology to the first attention of the linguistic scholar. Moreover, since the relation between the capacity of a race and the character of the tongue originated and elaborated by that race is a direct and necessary one, it could not but be the case that the speech of the most eminently and harmoniously endowed part of mankind should itself be of highest character and most harmonious development, and so the most worthy object of study, in its structure and its relations to mind and thought. And this advantage also, as we shall see more plainly hereafter, is in fact found to belong to Indo-European language: in the classification of all human speech it takes, unchallenged, the foremost rank.

But these considerations, weighty as they are, do not fully explain the specially intimate bond subsisting between general linguistic science and the study of Indo-European speech. Not only did the establishment of the unity of that family, and the determination of the relations of its members, constitute the most brilliant achievement of the new science; they were also its foundation; it began with the recognition of these truths, and has developed with their elaboration. The reason is not difficult to discover: Indo-European language alone furnished such a grand body of related facts as the science needed for a sure basis. Its dialects have a range, in the variety of their forms and in the length of the period of development covered by them, which is sought elsewhere in vain. They illustrate the processes of linguistic growth upon an unrivalled scale, and from a primitive era to which we can make but an imperfect approach among the other languages of mankind. Portions of the Chinese literature, it is true, are nearly or quite as old as anything Indo-European, and the Chinese language,

as will be shown later, is in some respects more primitive in its structure than any other human tongue; but what it was at the beginning, that it has ever since remained, a solitary example of a language almost destitute of a history. Egypt has records to show of an age surpassing that of any other known monuments of human speech; but they are of scanty and enigmatical content, and the Egyptian tongue also stands comparatively alone, without descendants, and almost without relatives. The Semitic languages come nearest to offering a worthy parallel; but they, too, fall far short of it. The earliest Hebrew documents are not greatly exceeded in antiquity by any others, and the Hebrew with its related dialects, ancient and modern, fills up a linguistic scheme of no small wealth; yet Semitic variety is, after all, but poor and scanty as compared with Indo-European; Semitic language possesses a toughness and rigidity of structure which has made its history vastly less full of instructive change; and its beginnings are of unsurpassed obscurity. The Semitic languages are rather a group of closely kindred dialects than a family of widely varied branches: their whole yield to linguistic science is hardly more than might be won from a single subdivision of Indo-European speech, like the Germanic or Romanic. None of the other great races into which mankind is divided cover with their dialects, to any noteworthy extent, time as well as space; for the most part, we know nothing more respecting their speech than is to be read in its present living forms. Now it is so obvious as hardly to require to be pointed out, that a science whose method is prevailingly historical, which seeks to arrive at an understanding of the nature, office, and source of language by studying its gradual growth, by tracing out the changes it has undergone in passing from generation to generation, from race to race, must depend for the soundness of its methods and the sureness of its results upon the fulness of illustration of these historical changes furnished by the material of its investigations. It is true that the student's historical researches are not wholly baffled by the absence of older dialects, with whose forms he may compare those of more modern date. Something of the development

of every language is indicated in its own structure with sufficient clearness to be read by analytic study. Yet more is to be traced out by means of the comparison of kindred contemporaneous dialects; for, in their descent from their common ancestor, it can hardly be that each one will not have preserved some portion of the primitive material which the others have lost. Thus—to illustrate briefly by reference to one or two of our former examples—the identity of our suffix *ly*, in such words as *godly* and *truly*, with the adjective *like* might perhaps have been conjectured from the English alone; and it is made virtually certain by comparison with the modern German (*göttlich*, *treulich*) or Netherlandish (*goddelijk*, *waarlijk*); it does not absolutely need a reference to older dialects, like the Anglo-Saxon or Gothic, for its establishment. Again, not only the Sanskrit and other ancient languages exhibit the full form *asmi*, whence comes our *I am*, but the same is also to be found almost unaltered in the present Lithuanian *esmi*. But, even if philological skill and acumen had led the student of Germanic language to the conjecture that *I loved* is originally *I love-did*, it must ever have remained a conjecture only, a mere plausible hypothesis, but for the accident which caused the preservation to our day of the fragment of manuscript containing a part of Bishop Ulfilas's Gothic Bible. And a host of points in the structure of the tongues of our Germanic branch which still remain obscure would, as we know, be cleared up, had we in our possession relics of them at a yet earlier stage of their separate growth. The extent to which the history of a body of languages may be penetrated by the comparison of contemporary dialects alone will, of course, vary greatly in different cases; depending, in the first place, upon the number, variety, and degree of relation of the dialects, and, in the second place, upon their joint and several measure of conservation of ancient forms: but it is also evident that the results thus arrived at for modern tongues will be, upon the whole, both scanty and dubious, compared with those obtained by comparing them with ancient dialects of the same stock. Occasionally, within the narrow limits of a single branch or group, the student

enjoys the advantage of access to the parent tongue itself, from which the more recent idioms are almost bodily derived: thus, for example, our possession of the Latin gives to our readings of the history of the Romanic tongues, our determination of the laws which have governed their growth, a vastly higher degree of definiteness and certainty than we could reach if we only knew that such a parent tongue must have existed, and had to restore its forms by careful comparison and deduction. Next in value to this is the advantage of commanding a rich body of older and younger dialects of the same lineage, wherein the common speech is beheld at nearer and remoter distances from its source, so that we can discover the direction of its currents, and fill out with less of uncertainty those parts of their network of which the record is obliterated. This secondary advantage we enjoy in the Germanic, the Persian, the Indian branches of Indo-European speech; and, among the grander divisions of human language, we enjoy it to an extent elsewhere unapproached in the Indo-European family, that immense and varied body of allied forms of speech, whose lines of historic development are seen to cover a period of between three and four thousand years, as they converge toward a meeting in a yet remoter past.

Herein lies the sufficient explanation of that intimate connection, that almost coincidence, which we have noticed between the development of Indo-European comparative philology and that of the general science of language. In order to comprehend human language in every part, the student would wish to have its whole growth, in all its divisions and subdivisions, through all its phases, laid before him for inspection in full authentic documents. Since, however, anything like this is impossible, he has done the best that lay within his power: he has thrown himself into that department of speech which had the largest share of its history thus illustrated, and by studying that has tried to learn how to deal with the yet more scanty and fragmentary materials presented him in other departments. Here could be formed the desired nucleus of a science; here the general laws of linguistic life could be discovered; here could be worked

out those methods and processes which, with such modifications as the varying circumstances rendered necessary, should be applied in the investigation of other types of language also. The foundation was broad enough to build up a shapely and many-sided edifice upon. Yet the study of Indo-European language is not the science of language. Such is the diversity in unity of human speech that exclusive attention to any one of its types could only give us partial and false views of its nature and history. Endlessly as the dialects of our family appear to differ from one another, they have a distinct common character, which is brought to our apprehension only when we compare them with those of other stock; they are far from exhausting the variety of expression which the human mind is capable of devising for its thought; the linguist who trains himself in them alone will be liable to narrowness of vision, and will stumble when he comes to walk in other fields. We claim only that their inner character and outer circumstances combine to give them the first place in the regard of the linguistic scholar; that their investigation will constitute in the future, as it has done in the past, a chief object of his study; and that their complete elucidation is both the most attainable and the most desirable and rewarding object proposed to itself by linguistic science.

The general method of linguistic research has already been variously set forth and illustrated, in an incidental way; but a summary recapitulation of its principles, with fuller reference to the grounds on which they are founded, will not be amiss at this point in our progress. The end sought by the scientific investigator of language, it will be remembered, is not a mere apprehension and exposition, however full and systematic, of the phenomena of a language, or of all human speech—of its words, its forms, its rules, its usages: that is work for grammarians and lexicographers. He strives to discover the *why* of everything: why these words, these affixes, have such and such meanings; why usage is thus, and not otherwise; why so many and such words and forms, and they only, are found in a given tongue—and so on, in ever farther-reaching inquiry, back even to the question,

why we speak at all. And since it appears that every existing or recorded dialect, and every word composing it, is the altered successor, altered in both form and meaning, of some other and earlier one; since all known language has been made what it is, out of something more original, by action proceeding from the minds of those who have used it, its examination must be conducted historically, like that of any other institution which has had a historic growth and development. All human speech has been during long ages modified, was even perhaps in the first place produced, by human capacities, as impelled by human necessities and governed by human circumstances; it has become what these influences by their gradual action have made it: it, on the one hand, is to be understood only as their product; they, on the other hand, are to be read in the effects which they have wrought upon it. To trace out the transformations of language, following it backward through its successive stages even to its very beginnings, if we can reach so far; to infer from the changes which it is undergoing and has undergone the nature and way of action of the forces which govern it; from these and from the observed character of its beginnings to arrive at a comprehension of its origin—such are the inquiries which occupy the attention of the linguistic scholar, and which must guide him to his ultimate conclusions respecting the nature of speech as an instrumentality of communication and of thought, and its value as a means of human progress.

And as in its general character, so also in its details, the process of investigation is historical. We have already seen (lecture second, p. 54) that the whole structure of our science rests upon the study of individual words; the labours of the etymologist must precede and prepare the way for everything that is to follow. But every etymological question is strictly a historical one; it concerns the steps of a historical process, as shown by historical evidences; it implies a judgment of the value of testimony, and a recognition of the truth fairly deducible therefrom. What is proved respecting the origin and changes of each particular word by all the evidence within reach, is the etymolo-

gist's ever-recurring inquiry. To answer it successfully, he needs a combination of many qualities; he must be, in fact, a whole court in himself: the acuteness, perseverance, and enterprise of the advocate must be his, to gather every particle of testimony, every analogy, every decision, bearing upon the case in hand; he must play the part of the opposing counsel, in carefully sifting the collected evidence, testing the character and disinterestedness of the witnesses, cross-examining them to expose their blunders and inconsistencies; he must have, above all, the learning and candour of the judge, that he may sum up and give judgment impartially, neither denying the right which is fairly established, nor allowing that which rests on uncertain allegation and insufficient proof. In short, the same gifts and habits of mind which make the successful historian of events are wanted also to make the successful historian of words.

The ill-repute in which etymology and those who follow it are held in common opinion is a telling indication of the difficulty attending its practice. The uncertainty and arbitrariness of its prevailing methods, the absurdity of its results, have been the theme of many a cutting and well-directed gibe. It has in all ages been a tempting occupation to curious minds, and always a slippery one. An incalculable amount of human ingenuity has been wasted in its false pursuit. Men eminent for acuteness and sound judgment in other departments of intellectual labour have in this been guilty of folly unaccountable. It has been often remarked that the Greeks and Romans, when once engaged in an etymological inquiry, seem to have taken leave of their common sense. Great as were the advantages offered by the Sanskrit language to its native analysts, in the regularity of its structure and the small proportion of obscure words which it contained, they stumbled continually as soon as they left the plain track of the commonest and clearest derivations, and their religious, philosophical, and grammatical books are filled with word-genealogies as fanciful and unsound as those of the classic writers. In no one respect does the linguistic science of the present day show its radical superiority to that of former times more clearly

than in the style and method of its etymologies: upon these, indeed, is its superiority directly founded.

The grand means, now, of modern etymological research is the extensive comparison of kindred forms. How this should be so appears clearly enough from what has been already taught respecting the growth of dialects and the genetical connections of languages. If spoken tongues stood apart from one another, each a separate and isolated entity, they would afford no scope for the comparative method. As such entities the ancient philology regarded them; or, if their relationship was in some cases recognized, it was wrongly apprehended and perversely applied—as when, for instance, the Latin was looked upon as derived from the Greek, and its words were sought to be etymologized out of the Greek lexicon, as corrupted forms of Greek vocables. In the view of the present science, while each existing dialect is the descendant of an older tongue, so other existing dialects are equally descendants of the same tongue. All have kept a part, and lost a part, of the material of their common inheritance; all have preserved portions of it in a comparatively unchanged form, while they have altered other portions perhaps past recognition. But, while thus agreed in the general fact and the general methods of change, they differ indefinitely from one another in the details of the changes effected. Each has saved something which others have lost, or kept in pristine purity what they have obscured or overlaid: or else, from their variously modified forms can be deduced with confidence the original whence these severally diverged. Every word, then, in whose examination the linguistic scholar engages, is to be first set alongside its correspondents or analogues in other related languages, that its history may be read aright. Thus the deficiencies of the evidence which each member of a connected group of dialects contains respecting its own genesis and growth are made up, in greater or less degree, by the rest, and historical results are reached having a greatly increased fulness and certainty. The establishment of a grand family of related languages, like the Indo-European, makes each member con-

tribute, either immediately or mediately, to the elucidation of every other.

The great prominence in the new science of language of this comparative method gave that science its familiar title of "comparative philology," a title which is not yet lost in popular usage, although now fully outgrown and antiquated. It designated very suitably the early growing phase of linguistic study, that of the gathering and sifting of material, the elaboration of methods, the establishment of rules, the deduction of first general results; it still properly designates the process by which the study is extended and perfected; but to call the whole science any longer "comparative philology" is not less inappropriate than to call the science of zoölogy "comparative anatomy," or botanical science the "comparison of plants."

But the comparative method, as we must not fail to notice, is no security against loose and false etymologizing; it is not less liable to abuse than any other good thing. If it is to be made fruitful of results for the advancement of science, it must not be wielded arbitrarily and wildly; it must have its fixed rules of application. Some appear to imagine that, in order to earn the title of "comparative philologist," they have but to take some given language and run with it into all the ends of the earth, collating its material and forms with those of any other tongue they may please to select. But that which makes the value of comparison — namely, genetical relationship — also determines the way in which it shall be rendered valuable. We compare in order to bring to light resemblances which have their ground and explanation in a real historical identity of origin. We must proceed, then, as in any other genealogical inquiry, by tracing the different lines of descent backward from step to step toward their points of convergence. The work of comparison is begun between the tongues most nearly related, and is gradually extended to those whose connection is more and more remote. We first set up, for example, a group like the Germanic, and by the study of its internal relations learn to comprehend its latest history, dis-

tinguishing and setting apart all that is the result of independent growth and change among its dialects, recognizing what in it is original, and therefore fair subject of comparison with the results of a like process performed upon the other branches of the same family. It needs not, indeed, that the restoration of primitive Germanic speech should be made complete before any farther step is taken; there are correspondences so conspicuous and palpable running through all the varieties of Indo-European speech, that, the unity of the family having been once established, they are at a glance seen and accepted at their true value. But only a small part of the analogies of two more distantly related languages are of this character, and their recognition will be made both complete and trustworthy in proportion as the nearer congeners of each language are first subjected to comparison. If English were the only existing Germanic tongue, we could still compare it with Attic Greek, and point out a host of coincidences which would prove their common origin; but, as things are, to conduct our investigation in this way, leaving out of sight the related dialects on each side, would be most unsound and unphilological; it would render us liable to waste no small share of our effort upon those parts of English which are peculiar, of latest growth, and can have no genetic connection whatever with aught in the Greek: it would expose us, on the one hand, to make false identifications (as between our *whole* and the Greek *holos*, 'entire'); and, on the other hand, to find diversity where the help of older dialectic forms on both sides would show striking resemblance. What analogy, for instance, do we discern between our *bear*, in *they bear*, and Greek *pherousi*? but comparison of the other Germanic dialects allows us to trace *bear* directly back to a Germanic form *berand*, and Doric Greek gives us *pheronti*, from which comes *pherousi* by one of the regular euphonic rules of the language; the law of permutation of mutes in the Germanic languages (see above, p. 97) exhibits *b* as the regular correspondent in Low German dialects to the original aspirate *ph*; and the historical identity of the two words compared, in root and termination, is thus put beyond the reach of cavil.

Yet more contrary to sound method would it be, for example, to compare directly English, Portuguese, Persian, and Bengali, four of the latest and most altered representatives of the four great branches of Indo-European speech to which they severally belong. Nothing, or almost nothing, that is peculiar to the Bengali as compared with the Sanskrit, to the Persian as compared with the ancient Avestan and Achæmenidan dialects, to the Portuguese as compared with the Latin, can be historically connected with what belongs to English or any other Germanic tongue. Their ties of mutual relationship run backward through those older representatives of the branches, and are to be sought and traced there.

But worst of all is the drawing out of alleged correspondences, and the fabrication of etymologies, between such languages as the English — or, indeed, any Indo-European dialect—on the one hand, and the Hebrew, or the Finnish, or the Chinese, on the other. Each of these last is the fully recognized member of a well-established family of languages, distinct from the Indo-European. If there be genetic relation between either of them and an Indo-European language, it must lie back of the whole grammatical development of their respective families, and can only be brought to light by the reduction of each, though means of the most penetrating and exhaustive study of the dialects confessedly akin with it, to its primitive form, as cleared of all the growth and change wrought upon it by ages of separation. There may be scores, or hundreds, of apparent resemblances between them, but these are worthless as signs of relationship until an investigation not less profound than we have indicated shall show that they are not merely superficial and delusive.

Let it not be supposed that we are reasoning in a vicious circle, in thus requiring that two languages shall have been proved related before the correspondences which are to show their relationship shall be accepted as real. We are only setting forth the essentially cumulative nature of the evidences of linguistic connection. The first processes of comparison by which it is sought to establish the position and relations of a new language are tentative merely. No sound linguist

is unmindful of the two opposing possibilities which interfere with the certainty of his conclusions: first, that seeming coincidences may turn out accidental and illusory only; second, that beneath apparent discordance may be hidden genetic identity. With every new analogy which his researches bring to view, his confidence in the genuineness and historic value of those already found is increased. And when, examining each separate fact in all the light that he can cast upon it, from sources near and distant, he has at length fully satisfied himself that two tongues are fundamentally related, their whole mutual aspect is thereby modified; he becomes expectant of signs of relationship everywhere, and looks for them in phenomena which would not otherwise attract his attention for a moment. When, on the contrary, an orderly and thorough examination, proceeding from the nearer to the remoter degrees of connection, has demonstrated the position of two languages in two diverse families, the weight of historic probability is shifted to the other scale, and makes directly against the interpretation of their surface resemblances as the effect of anything but accident or borrowing.

The new etymological science differs from the old, not in the character of the results which it is willing to admit, but in the character of the evidence on which it is willing to admit them. It will even derive *lucus*, 'grove,' from *non lucendo*, 'its not shining there,' if only historical proof of the derivation be furnished. It finds no difficulty in recognizing as identical two words like the French *évêque* and the English *bishop*, which have not a single sound or letter in common; for each is readily traceable back to the Greek *episkopos*.* But it does not draw thence the conclusion that, in this or in any other pair of languages, two words meaning the same thing may, whatever their seeming discordance, be assumed to be one, or are likely to be proved

* *Evêque*, earlier *evesque*, *eveze*, represents the syllables *episk*, while *bishop*, earlier *biskop*, represents the syllables *piskop*. Each has saved, and still accents, the accented syllable of the original; but the French, whose words are prevailingly accented on their final syllables, has dropped off all that followed it; while the Germanic tongues, accenting more usually the penult in words of this structure, has retained the succeeding syllable.

one: it waits for the demonstration in each separate case. The claim made in our third lecture, that, in the history of linguistic changes, any given sound may pass over into any other, any given meaning become modified to its opposite, or to something apparently totally unconnected with it, may seem to take away from etymology all reliable basis; but it is not so; for the same researches which establish this claim show also the difference between those facile changes which may be looked for everywhere, and the exceptional ones which only direct and convincing evidence can force us to accept as actual in any language; they teach us to study the laws of transition of each separate language as part of its idiosyncrasy, and to refrain from applying remote and doubtful analogies in the settlement of difficult questions.

In short, the modern science of language imposes upon all who pursue it thoroughness and caution. It requires that every case be examined in all its bearings. It refuses to accept results not founded on an exhaustive treatment of all the attainable evidence. It furnishes no instruments of research which may not be turned to false uses, and made to yield false results, in careless and unskilful hands. It supplies nothing which can take the place of sound learning and critical judgment. Even those who are most familiar with its methods may make lamentable failures when they come to apply them to a language of which they have only superficial knowledge,* or which they compare directly with some distant tongue, regardless of its relations in its own family, and of its history as determined by comparison with these. A scholar profoundly versed in the comparative philology of some special group of languages, and whom we gladly suffer to instruct us as to their development, may have nothing to say that is worth our listening to, when he would fain trace their remoter connections with groups of which he knows little or nothing. Notwithstanding the

* Thus, as a striking example and warning, hardly a more utter caricature of the comparative method is to be met with than that given by Bopp, the great founder and author of the method, himself, in the papers in which he attempts to prove the Malay-Polynesian and the Caucasian languages entitled to a place in the Indo-European family.

immense progress which the study of language has made during the past few years, the world is still full of hasty generalizers, who would rather skim wide and difficult conclusions off the surface of half-examined facts than wait to gather them as the fruits of slow and laborious research. The greater part of the rubbish which is even now heaping up in the path of our science, encumbering its progress, comes from the neglect of these simple principles: that no man is qualified to compare fruitfully two languages or groups who is not deeply grounded in the knowledge of both, and that no language can be fruitfully compared with others which stand, or are presumed to stand, in a more distant relationship with it, until it has been first compared with its own next of kin.

We see, it may be farther remarked, upon how narrow and imperfect a basis those comparative philologists build who are content with a facile setting side by side of words; whose materials are simple vocabularies, longer or shorter, of terms representing common ideas. There was a period in the history of linguistic science when this was the true method of investigation, and it still continues to be useful in certain departments of the field of research. It is the first experimental process; it determines the nearest and most obvious groupings, and prepares the way for more penetrating study. Travellers, explorers, in regions exhibiting great diversity of idiom and destitute of literary records—like our western wilds, or the vast plains of inner Africa—do essential service by gathering and supplying such material, anything better being rendered inaccessible by lack of leisure, opportunity, or practice. But it must be regarded as provisional and introductory, acceptable only because the best that is to be had. Genetic correspondences in limited lists of words, however skilfully selected, are apt to be conspicuous only when the tongues they represent are of near kindred; and even then they may be in no small measure obscured or counterbalanced by discordances, so that deeper and closer study is needed, in order to bring out satisfactorily to view the fact and degree of relationship. Penetration of the secrets of linguistic structure and growth, dis-

covery of correspondences which lie out of the reach of careless and uninstructed eyes, rejection of deceptive resemblances which have no historical foundation—these are the most important part of the linguistic student's work. Surface collation without genetic analysis, as far-reaching as the attainable evidence allows, is but a travesty of the methods of comparative philology.

Another not infrequent misapprehension of etymologic study consists in limiting its sphere of action to a tracing out of the correspondences of words. This is, indeed, as we have called it, the fundamental stage, on the solidity of which depends the security of all the rest of the structure; but it is only that. Comparative etymology, like chemistry, runs into an infinity of detail, in which the mind of the student is sometimes entangled, and his effort engrossed; it has its special rules and methods, which admit within certain limits of being mechanically applied, by one ignorant or heedless of their true ground and meaning. Many a man is a skilful and successful hunter of verbal connections whose views of linguistic science are of the crudest and most imperfect character. Not only does he thus miss what ought to be his highest reward, the recognition of those wide relations and great truths to which his study of words should conduct him, but his whole work lacks its proper basis, and is liable to prove weak at any point. The history of words is inextricably bound up with that of human thought and life and action, and cannot be read without it. We fully understand no word till we comprehend the motives and conditions that called it forth and determined its form. The word *money*, for example, is not explained when we have marshalled the whole array of its correspondents in all European tongues, and traced them up to their source in the Latin *moneta:* all the historical circumstances which have caused a term once limited to an obscure city to be current now in the mouths of such immense communities; the wants and devices of civilization and commerce which have created the thing designated by the word and made it what it is; the outward circumstances and mental associations which, by successive changes, have worked out the name from a root

signifying 'to think;' the structure of organ, and the habits of utterance—in themselves and in their origin—which have metamorphosed *monéta* into *móney*:—all this, and more, is necessary to the linguistic scholar's perfect mastery of this single term. There is no limit to the extent to which the roots of being of almost every word ramify thus through the whole structure of the tongue to which it belongs, or even of many tongues, and through the history of the people who speak them: if we are left in most cases to come far short of the full knowledge which we crave, we at least should not fail to crave it, and to grasp after all of it that lies within our reach.

We have been regarding linguistic comparison as what it primarily and essentially is, the effective means of determining genetical relationship, and investigating the historical development of languages. But we must guard against leaving the impression that languages can be compared for no other purposes than these. In those wide generalizations wherein we regard speech as a human faculty, and its phenomena as illustrating the nature of mind, the processes of thought, the progress of culture, it is often not less important to put side by side that which in spoken language is analogous in office but discordant in origin than that which is accordant in both. The variety of human expression is well-nigh infinite, and no part of it ought to escape the notice of the linguistic student. The comparative method, if only it be begun and carried on aright—if the different objects of the genetic and the analogic comparison be kept steadily in view, and their results not confounded with one another—need not be restricted in its application, until, starting from any centre, it shall have comprehended the whole circle of human speech.

LECTURE VII.

Beginnings of Indo-European language. Actuality of linguistic analysis. Roots, pronominal and verbal; their character as the historical germs of our language; development of inflective speech from them. Production of declensional, conjugational, and derivative apparatus, and of the parts of speech. Relation of synthetic and analytic forms. General character and course of inflective development.

THE last two lectures have given us a view of the Indo-European family of languages. We have glanced at the principal dialects, ancient and modern, of which it is composed, noticing their exceeding variety and the high antiquity of some among them—the unequalled sweep, of time and of historic development together, which they include and cover. The family has been shown to be of preëminent importance and interest to the linguistic student, because the peoples to whom it belongs have taken during the past two thousand years or more a leading or even the foremost part in the world's history, because it includes the noblest and most perfect instruments of human thought and expression, and because upon its study is mainly founded the present science of language. We examined, in a general way, the method pursued in its investigation—namely, a genetic analysis, effected chiefly by the aid of a widely extended comparison of the kindred forms of related dialects (whence the science gets its familiar name of "comparative philology")—and noted briefly some of the misapprehensions and misapplications to which this was liable. At present, before going on to survey the other great families

of language, and to consider the relation in which they stand to the Indo-European, we have to pause long enough to look at the main facts in the history of growth of the latter—of our own form of speech, using the word "our" in the widest sense to which we have as yet extended it. This we do, partly on account of the intrinsic interest of the subject, and partly because the results thus won will be found valuable, and even almost indispensable, in the course of our farther inquiries.

The history of Indo-European language has been more carefully read, and is now more thoroughly understood, than that of any other of the grand divisions of human speech. Not that our knowledge of it is by any means complete, or is not marked even by great and numerous deficiencies and obscurities: owing in no small part to the obliteration of needed evidence, and hence irreparable; but in part also to incomplete comparison and analysis of the material yet preserved, and therefore still admitting and sure ere long to receive amendment. Such deficiencies, however, are more concerned with matters of minor detail, and less with facts and principles of fundamental consequence, here than elsewhere. Hence the mode of development of language in general, even from its first commencement, can in no other way be so well exemplified as by tracing its special history in this single family.

Our first inquiry concerns the primitive stage of Indo-European language, its historical beginnings.

The general processes of linguistic growth and change, as they have for long ages past been going on in all the dialects of our kindred, were set forth and illustrated with some detail in the early part of our discussions respecting language (in the second and third lectures). We there saw that, in order to provide new thought and knowledge with its appropriate signs, and to repair the waste occasioned by the loss of words from use and memory, and the constant wearing out of forms, new combinations were made out of old materials, words of independent significance reduced to the position and value of modifying appendages to other words, and meanings variously altered and transferred. These

processes may, for aught we can see, work on during an indefinite period in the future, with never-ending evolution out of each given form of speech of another slightly differing from it; even until every now existing dialect shall have divided into numerous descendants, and each of these shall have varied so far from its ancestor that their kindred shall be scarcely, or not at all, discoverable. Have we, now, any good reason to believe that they have not worked on thus indefinitely in the past also, with a kaleidoscopic resolution of old forms and combination of new, changing the aspect of language without altering its character as a structure? Or, are we able to find distinct traces of a condition of speech which may be called primitive in comparison with that in which it at present exists?

This question admits an affirmative answer. The present structure of language has its beginnings, from which we are not yet so far removed that they may not be clearly seen. Our historical analysis does not end at last in mere obscurity; it brings us to the recognition of elements which we must regard as, if not the actual first utterances of men, at least the germs out of which their later speech has been developed. It sets before our view a stage of expression essentially different from any of those we now behold among the branches of our family, and serving as their common foundation.

It must be premised that this belief rests entirely upon our faith in the actuality of our analytical processes, as being merely a retracing of the steps of a previous synthesis —in the universal truth of the doctrine that the elements into which we separate words are those by the putting together of which those words were at first made up. The grounds upon which such a faith reposes were pretty distinctly set forth in the second lecture (p. 66), but the importance of the subject will justify us in a recapitulation of the argument there presented.

No one can possibly suppose that we should ever have come to call our morning meal *breakfast*, if there had not already existed in our language the two independent words *break* and *fast*; any more than that we should say *telegraph-*

wire, *hickory-pole*, *campaign-document*, *gun-boat*, without previous possession of the simple words of which are formed these modern compounds. *Fearful* and *fearless*, in like manner, imply the existence beforehand of the noun *fear*, and of the adjectives *full* and *loose*, or their older equivalents, which have assumed, with reference to that noun, the quality of suffixes. Nor should we have any adverbial suffix *ly*, if we had not earlier had the adjective *like*, nor any preterits in *d* (as *I love-d*), but for the fact that our Germanic ancestors owned an imperfect corresponding to our *did*, which they added to their new verbs to express past action. Any one, I think, will allow that elements distinguishable by word-analysis which can thus be identified with independent words are thereby proved to have been themselves once in possession of an independent *status* in the language, and to have been actually reduced by combination to the form and office with which our analysis finds them endowed. But farther, few or none will be found to question that all those formative elements which belong to the Germanic languages alone, of which no traces are to be discovered in any other of the branches of the Indo-European family, which constitute the peculiar patrimony of some or all of the dialects of our branch, must have been gained by the latter since their separation from the common stock, and in the same way with the rest, even though we can no longer demonstrate the origin of each affix. With the disguising and effacing effects of the processes of linguistic change fully present to our apprehensions, we shall not venture to conclude that those cases in which our historical researches fail to give us the genesis of both the elements of a compound form are fundamentally different from those in which it fully succeeds in doing so. The difference lies, not in the cases themselves, but in our attitude toward them; in our accidental possession of information as to the history of the one, and our lack of it as to that of the other. This reasoning, however, obviously applies not to Germanic speech alone; it is equally legitimate and cogent in reference to all Indo-European language. We cannot refuse to believe that the whole history of this family of languages has been, in its

grand essential features, the same; that their structure is homogeneous throughout. There is no reason whatever for our assuming that the later composite forms are made up, and not the earlier; that the later suffixes are elaborated out of independent elements, and not the earlier. So far back as we can trace the history of language, the forces which have been efficient in producing its changes, and the general outlines of their modes of operation, have been the same; and we are justified in concluding, we are even compelled to infer, that they have been the same from the outset. There is no way of investigating the first hidden steps of any continuous historical process, except by carefully studying the later recorded steps, and cautiously applying the analogies thence deduced. So the geologist studies the forces which are now altering by slow degrees the form and aspect of the earth's crust, wearing down the rocks here, depositing beds of sand and pebbles there, pouring out floods of lava over certain regions, raising or lowering the line of coast along certain seas; and he applies the results of his observations with confidence to the explanation of phenomena dating from a time to which men's imaginations, even, can hardly reach. The legitimacy of the analogical reasoning is not less undeniable in the one case than in the other. You may as well try to persuade the student of the earth's structure that the coal-bearing rocks lie in parallel layers, of alternating materials, simply because it pleased God to make them so when he created the earth; or that the impressions of leaves, the stems and trunks of trees, the casts of animal remains, shells and bones, which they contain, the ripple and rain-marks which are seen upon them, are to be regarded as the sports of nature, mere arbitrary characteristics of the formation, uninterpretable as signs of its history—as to persuade the student of language that the indications of composition and growth which he discovers in the very oldest recorded speech, not less than in the latest, are only illusory, and that his comprehension of linguistic development must therefore be limited to the strictly historical period of the life of language. It is no prepossession, then, nor *à priori* theory, but a true logical

necessity, a sound induction from observed facts, which brings us to the conclusion that all linguistic elements possessing distinct meaning and office, variously combined and employed for the uses of expression, are originally independent entities, having a separate existence before they entered into mutual combination.

In the light of these considerations let us examine a single word in our language, the word *irrevocability*. It comes to us from the Latin, where it had the form *irrevocabilitas* (genitive *-tatis*). It is clearly made by the addition of *ty* (*tas*, *tatis*) to a previously existing *irrevocable* (*irrevocabili-s*), just as we now form a new abstract noun from any given adjective by adding *ness*: for example, *doughfacedness*. Again, *revocable* (*revocabilis*) preceded *irrevocable*, as *dutiful* preceded *undutiful*. Further, if there had been no verb *to revoke* (*revocare*), there would have been no adjective *revocable*, any more than *lovable* without the verb *to love*. Yet once more: although we in English have the syllable *voke* only in composition with prefixes, as *revoke*, *evoke*, *invoke*, *provoke*, yet in Latin, as the verb *vocare*, 'to call,' it is, of course, older than any of these its derivatives, as *stand* is older than *understand* and *withstand*. Thus far our way is perfectly clear. But while, in our language, *voke* appears as a simple syllable, uncombined with suffixes, this is only by the comparatively recent effect of the wearing-out processes, formerly illustrated (in the third lecture); in the more original Latin, it is invariably associated with formative elements, which compose with it forms like *vocare*, 'to call,' *vocat*, 'he calls,' *vocabar*, 'I was called;' or, in substantive uses, *vocs* (*vox*), 'a calling, a voice,' *vocum*, 'of voices;' and so on. There is nothing, so far as concerns the formative elements themselves, to distinguish this last class of cases from the others, before analyzed; each suffix has its distinct meaning and office, and is applied in a whole class of analogous words; and some of them, at least, are traceable back to the independent words out of which they grew. The only difference is that here, if we cut off the formative elements, we have left, not a word, actually employed as such in any ancient language of our family, but a significant

syllable, expressing the general and indeterminate idea of 'calling,' and found to occur in connected speech only when limited and defined by the suffixes which are attached to it. This is not, however, a peculiarity which can exempt the words so formed from a like treatment, leading to like conclusions, with the rest; we must still trust in the reality of our analysis; and especially, when we consider such forms as the Sanskrit *vak-mi*, *vak-shi*, *vak-ti*, where the *mi*, *shi*, and *ti* are recognizable pronouns, making compounds which mean clearly 'call-I,' 'call-thou,' 'call-he,' we cannot doubt that the element *voc* (*vak*) had also once an independent *status*, that it was a word, a part of spoken speech, and that the various forms which contain it were really produced by the addition of other elements to it, and their fusion together into a single word, in the same manner in which we have fused *truth* and *full* into *truthful*, *truth* and *loose* into *truthless*, *true* and *like* into *truly*.

The same conclusion may be stated in more general terms, as follows. The whole body of suffixes, of formative endings, is divided into two principal classes: first, primary, or such as form derivatives directly from roots; second, secondary, or such as form derivatives from other derivatives, from themes containing already a formative element. But the difference between these two classes is in their use and application, not in their character and origin. No insignificant portion of each is traceable back to independent words, and the presumption alike for each is that in all its parts it was produced in the same manner. If, then, we believe that the themes to which the secondary endings are appended were historical entities, words employed in actual speech before their further composition, we must believe the same respecting the roots to which are added the primary endings: these are not less historical than the others.

The conclusion is one of no small consequence. Elements like *voc*, each composing a single syllable, and containing no traceable sign of a formative element, resisting all our attempts at reduction to a simpler form, are what we arrive at as the final results of our analysis of the Indo-European vocabulary; every word of which this is made up—save those

whose history is obscure, and cannot be read far back toward its beginning—is found to contain a monosyllabic root as its central significant portion, along with certain other accessory portions, syllables or remnants of syllables, whose office it is to define and direct the radical idea. The roots are never found in practical use in their naked form; they are (or, as has been repeatedly explained, have once been) always clothed with suffixes, or with suffixes and prefixes; yet they are no mere abstractions, dissected out by the grammarian's knife from the midst of organisms of which they were ultimate and integral portions; they are rather the nuclei of gradual accretions, parts about which other parts gathered to compose orderly and membered wholes; germs, we may call them, out of which has developed the intricate structure of later speech. And the recognition of them in this character is an acknowledgment that Indo-European language, with all its fulness and inflective suppleness, is descended from an original monosyllabic tongue; that our ancestors talked with one another in single syllables, indicative of the ideas of prime importance, but wanting all designation of their relations; and that out of these, by processes not differing in their nature from those which are still in operation in our own tongue, was elaborated the marvellous and varied structure of all the Indo-European dialects.

Such is, in fact, the belief which the students of language have reached, and now hold with full confidence. New and strange but a few years ago, it commands at present the assent of nearly all comparative philologists, and is fast becoming a matter of universal opinion. Since, however, it is still doubted and opposed by a few even among linguistic scholars, and is doubtless more or less unfamiliar and startling to a considerable part of any educated community, it will be proper that we combine with our examination of it some notice and refutation of the arguments by which it is assailed.

It is surely unnecessary, in the first place, to protest against any one's taking umbrage at this theory of a primitive monosyllabic stage of Indo-European language out of regard

for the honour and dignity of our remote ancestors. The linguist is making a historical inquiry into the conditions of that branch of the human family to which we belong, and should no more be shocked at finding them talking in single syllables than dwelling in caves and huts of branches, or clad in leaves and skins. To require, indeed, for man's credit that he should have been sent upon the earth with a fully developed language miraculously placed in his mouth, with lists of nouns, verbs, and adverbs stored away in his memory, to be drawn upon at will, is not more reasonable than to require that the first human beings should have been born in full suits of clothes, and with neat cottages, not destitute of well-stocked larders, ready built over their heads. It surely is most of all to the honour of human nature that man should have been able, on so humble a foundation, to build up this wondrous fabric of speech; and also, as we may already say, that he should have been allowed to do so is more in accordance with the general plan of the Creator, who has endowed him with high capacities, and left him to work them out to their natural and intended results.

Nor, again, will any one venture to object that it would have been impossible to make so imperfect and rudimentary a language answer any tolerable purpose as a means of expression and communication—any one, at least, who knows aught of the present condition of language among the other races of the globe. One tongue, the Chinese—as we shall see more particularly farther on (in the ninth lecture)—has never advanced out of its primitive monosyllabic stage; its words remain even to the present day simple radical syllables, closely resembling the Indo-European roots, formless, not in themselves parts of speech, but made such only by their combination into sentences, where the connection and the evident requirements of the sense show in what signification and relation each is used. Yet this scanty and crippled language has served all the needs of a highly cultivated and literary people for thousands of years.

After these few words of reply to one or two of the difficulties which sometimes suggest themselves at first blush to

those before whom is brought the view we are defending, we will next proceed to examine in more detail the original monosyllabism of Indo-European language, and see of what character it was.

The roots of our family of languages are divided into two distinct classes: those ultimately indicative of position merely, and those significant of action or quality. The former class are called demonstrative or pronominal roots; the latter class are styled predicative or verbal roots.

The pronominal roots are subjective in their character; they have nothing to do with the inherent qualities of objects, but mark them simply in their relation to the speaker, and primarily their local relation; they give the distinction between the *this* and the *that*, the nearer and the remoter object of attention, myself here, you there, and the third person or thing yonder, present or absent. By their nature, they are not severally and permanently attachable to certain objects or classes of objects, nor are they limited in their application; each of them may designate any and every thing, according to the varying relation sustained by the latter to the person or thing with reference to which it is contemplated. Only one thing can be called the *sun*; only certain objects are *white*; but there is nothing which may not be *I*, and *you*, and *it*, alternately, as the point from which it is viewed changes. In this universality of their application, as dependent upon relative situation merely, and in the consequent capacity of each of them to designate any object which has its own specific name besides, and so, in a manner, to stand for and represent that other name, lies the essential character of the pronouns.* From the pronominal roots come most directly the demonstrative pronouns, of which the personal are individualized forms, and the interrogatives; from these are developed secondarily the possessives and relatives, and the various other subordinate classes. They also generate adverbs of position and of direction. To examine in detail the forms they take, and the variations of

* Their Hindu title, *sarvanâman*, 'name for everything, universal designation,' is therefore more directly and fundamentally characteristic than the one we give them, *pronoun*, 'standing for a name.'

the fundamental distinction between *this* and *that* which they are applied to express, would lead us too far. So much as this may be pointed out: those beginning with *m* are especially employed to denote the subject, the *ego*, 'me myself;' those with *t* and *n* are used more demonstratively, and those with *k* interrogatively. They are few in number, hardly counting a dozen all together, including some which are probably variants of the same original. They are of the simplest phonetic structure, consisting either of a pure vowel, like *a* or *i*, or of a vowel combined with a single preceding consonant, forming an open syllable, which is the easiest that the organs of articulation can be called upon to utter: instances are *ma, na, ta, tu, ka.*

The roots of the other class, those of action or quality, are very much more numerous, being reckoned by hundreds; and they are of more complicated structure, illustrating every variety of the syllable, from the pure single vowel to the vowel preceded or followed, or both, by one consonant, or even by more than one. They are of objective import, designating the properties and activities inherent in natural objects—and prevailingly those that are of a sensible phenomenal character, such as modes of motion and physical exertion, of sound, and so forth. Let us notice a few instances of roots which are shown to have belonged to the original language of our family by being still met with in all or nearly all of its branches. Such are *i* and *ga*, denoting simple motion; *ak*, swift motion; *stā*, standing; *ās* and *sad*, sitting; *kī*, lying; *pad*, walking; *vas*, staying; *sak*, following; *vart*, turning; *sarp*, creeping; *pat*, flying; *plu*, flowing; *ad*, eating; *pā*, drinking; *an*, blowing; *vid*, seeing; *klu*, hearing; *vak*, speaking; *dhā*, putting; *dā*, giving; *labh*, taking; *garbh*, holding; *dik*, pointing out; *bhar*, bearing; *kar*, making; *tan*, stretching; *skid* and *dal*, dividing; *bandh*, binding; *star*, strewing; *par*, filling; *mar*, rubbing; *bhā*, shining; *bhū*, growing, etc., etc.

In endeavouring to apprehend the significance of these roots, we must divest their ideas of the definite forms of conception which we are accustomed to attach to them: each represents its own meaning in nakedness, in an indeter-

minate condition from which it is equally ready to take on the semblance of verb or of noun. We may rudely illustrate their quality by comparing them with such a word in our own language as *love*, which, by the wearing off of the formative elements with which it was once clothed, has reverted to the condition of a bare root, and which must therefore now be placed in such connection, or so pregnantly and significantly uttered, as to indicate to the intelligent and sympathizing listener in what sense it is meant and is to be understood —whether as verb, in "I *love*," or as substantive, in "my *love*," or as virtual adjective, in "*love*-letter."

The inquiry, which might naturally enough be raised at this point, how the radical syllables of which we are treating were themselves originated, and whether there be any natural and necessary connection between them, or any of them, and the ideas which they represent, such as either necessitated or at least recommended the allotment of the particular sign to the particular conception, we must pass by for the present, having now to do only with that for which direct evidence is to be found in language itself, with the historically traceable beginnings of Indo-European speech; this question, with its various dependent questions of a more theoretical and recondite nature, is reserved for consideration at a later time (in the eleventh lecture).

It deserves to be renewedly urged that, in this account of the primitive stage of Indo-European language, there is nothing which is not the result of strict and careful induction from the facts recorded in the dialects of the different members of the family. No one's theory as to what the beginnings of language must have been, or might naturally have been expected to be, has had anything to do with shaping it. It has been a matter of much controversy among linguistic theorizers what parts of speech language began with; whether nouns or verbs were the first words; but I am not aware that any acute thinker ever devised, upon *à priori* grounds, a theory at all closely agreeing with the account of the matter at which comparative philology soon arrived through her historical researches. That the first traceable linguistic entities are not names of concrete

objects, but designate actions, motions, phenomenal conditions, is a truth resting on authority that overrides all preconceived theories and subjective opinions. How far and why it is accordant with what a sound theory, founded on our general knowledge of human nature and human speech, would teach, and is therefore entitled to be accepted as a satisfactory explanation of the way in which men began to talk, we shall inquire in the lecture devoted to such subjects.

Thus is it, also, as regards the division of the roots into two classes, pronominal and verbal: this division is so clearly read in the facts of language that its acceptance cannot be resisted. Some are loth to admit it, and strive to find a higher unity in which it shall disappear, the two classes falling together into one; or to show how the pronominal may be relics of verbal roots, worn down by linguistic usage to such brief form and unsubstantial significance; but their efforts must at least be accounted altogether unsuccessful hitherto, and it is very questionable whether they are called for, or likely ever to meet with success. As regards the purposes of our present inquiry, the double classification is certainly primitive and absolute; back to the very earliest period of which linguistic analysis gives us any knowledge, roots verbal and roots pronominal are to be recognized as of wholly independent substance, character, and office.

But, it may very properly be asked, how do we know that the roots which we have set up, and the others like them, are really ultimate and original? why may they not be the results of yet more ancient processes of linguistic change—like *love* and *lie*, and so many others, which have been repeatedly cited, and shown to have taken in our language the place of earlier complicated forms, such as *lagamasi* and *laganti*? how should they be proved different from our word *count*, for example, which we treat like an original root, expanding it by means of suffixes into various forms—as he *counts*, they *counted*, *counting*, *counter*, *countable*—while yet it is only a modern derivative from a Latin compound verb containing a preposition, namely *computare*, 'to think together, combine in thought,' got through the medium of the

French *compter* (where the *p* is still written, though not pronounced)—in fact, the same word as the evidently made-up *compute?* Of apparent monosyllabic verbal roots like this, which are readily proved by a little historical study to be of polysyllabic origin, or to contain the relics of formative processes, our language contains no small number: other instances are *preach* from *pre-dicare*, *vend* from *venum-dare*, *blame* from Greek *blas-phēmein*; *don* and *doff* from *do on* and *do off*; *learn*, of which the *n* is a passive ending, added to *lere*, 'teach,' whence comes *lore*, 'doctrine;' *to throng*, a denominative from the noun *throng*, which is derived from *thring* (Anglo-Saxon *thringan*), 'press,' lost in our modern use (as if we were to lose *sing*, and substitute for it *to song*, from the derived noun *song*); *to blast*, a like denominative from *blast*, a derivative from *blæsan*, 'to blow, blare;' and so on. Such are to be found also abundantly in other languages, modern and ancient; why not as well among the alleged Indo-European roots? Now there can be no question whatever that such additions to the stock of verbal expression have been produced at every period of the growth of language, not only throughout its recorded career, but also in times beyond the reach of historic analysis. There is not a known dialect of our family which does not exhibit a greater or less number of seeming roots peculiar to itself; and of these the chief part may be proved, or are to be assumed, to be of secondary origin, and not at all entitled to lay claim to the character of relics from the original stock, lost by the sister dialects. Even the Sanskrit, upon which we have mainly to rely for our restoration of Indo-European roots, possesses not a few which are such only in seeming, which are of special Aryan or Indian growth, and valueless for the construction of general Indo-European etymologies. And, yet farther, among those very radical syllables whose presence in the tongues of all the branches proves them a possession of the original community before its dispersion, there are some which show the clearest signs of secondary formation. As a single example, let us take the root *man*, 'think' (in Latin *me-min-i*, *mon-eo*, *mens*; Greek *men-os*, *man-tis*; Lithuanian *men-ù*; Mœso-

Gothic *man*, German *mein-en*, our *I mean*): distinct analogies lead us to see in it a development—probably through a derivative noun, of which it is the denominative—of the older root *mā*, meaning either 'to make' or 'to measure;' a designation for the mental process having been won by figuratively regarding it as a mental manufacture or production, or else as an ideal mensuration of the object of thought, a passing from point to point of it, in estimation of its dimension and quality. Some linguistic scholars go much farther than others in their attempts at analyzing the Indo-European roots, and referring them to more primitive elements; all the methods of secondary origin which we have illustrated above have been sought for and thought to be recognized among them; and there are those who are unwilling to believe that any absolutely original root can have ended otherwise than in a vowel, or begun with more than a single consonant, and who therefore regard all radical syllables not conforming with their norm as the product of composition or fusion with formative elements. We need not here enter into the question as to the justice of these extreme views, or a criticism of the work of the root-analysts; we are compelled at any rate to concede that the results of growth are to be seen among even the earliest traceable historical roots; that we must be cautious how we claim ultimateness for any given radical syllable, unless we can succeed in establishing an ultimate and necessary tie between it and the idea it represents; and that the search after the absolutely original in human speech is a task of the most obscure and recondite character.

But these concessions do not impair our claim that the inflective structure of Indo-European speech is built up upon a historical foundation of monosyllabic roots. If the particular roots to which our analysis brings us are not in all cases the products of our ancestors' first attempts at articulation, they are at any rate of the same kind with these, and represent to us the incipient stage of speech. If in every dissyllable whose history we can trace we recognize a compound structure, if in every nominal and verbal form we find a formative element which gives it character as

noun or verb, then we must believe that the germs out of which our language grew were not more complicated than single syllables, and that they possessed no distinct character as nouns or verbs, but were equally convertible into both. Our researches are only pointed a step farther back, without a change of method or result. That in these roots we approach very near to, if we do not quite touch, the actual beginnings of speech, is proved by other considerations. In order to bring into any language new apparent roots, and give them mobility by clothing them with inflections, a system of inflections must have been already elaborated by use with other roots in other forms. We cannot apply our *d* as sign of the imperfect tense to form such words as *I electrified*, *I telegraphed*, until we have worked down our preterit *did*, in substance and meaning, to such a mere formative element. And when we have traced the suffix back until we find it identical with the independent word out of which it grew, we know that we are close upon the beginning of its use, and have before us virtually that condition of the language in which its combinations were first made. So also with the adverbial suffix *ly*, when we have followed it up to *līce*, a case of the adjective *līc*, 'like.' Now, in connection with the roots of which examples have been given above, we see in actual process of elaboration the general system of Indo-European inflection, the most ancient, fundamental, and indispensable part of our grammatical apparatus; and we infer that these roots and their like are the foundation of our speech, the primitive material out of which its high and complicated fabric has been reared. It is not possible to regard them as the worn-down relics of a previous career of inflective development. The English, it is true, has been long tending, through the excessive prevalence of the wearing-out processes, toward a state of flectionless monosyllabism; but such a monosyllabism, where the grammatical categories are fully distinguished, where relational words and connectives abound, where every vocable inherits the character which the former possession of inflection has given it, where groups of related terms are applied to related uses, is a very different thing from a primitive

monosyllabism like that to which the linguistic analyst is conducted by his researches among the earliest representatives of Indo-European language; and he finds no more difficulty in distinguishing the one from the other, and recognizing the true character of each, than does the geologist in distinguishing a primitive crystalline formation from a conglomerate, composed of well-worn pebbles, of diverse origin and composition, and containing fragments of earlier and later fossils. If the English were strictly reduced to its words of one syllable, it would still contain an abundant repertory of developed parts of speech, expressing every variety of idea, and illustrating a rich phonetic system. The Indo-European roots are not parts of speech, but of indeterminate character, ready to be shaped into nouns and verbs by the aid of affixes; they are limited in signification to a single class of ideas, the physical or sensual, the phenomenal, out of which the intellectual and moral develop themselves by still traceable processes; and in them is represented a system of articulated sounds of great simplicity. It will be not uninstructive to set down here, for comparison with the spoken alphabet of our modern English, already given (see p. 91), that scanty scheme of articulations, containing but three vowels and twelve consonants, which alone is discoverable in the earliest Indo-European language; it is as follows:

	a		Vowels.
i		*u*	Vowels.
	l,r		Semivowel.
	n	*m*	Nasals.
*h**			Aspiration.
	s		Sibilant.
g	*d*	*b*	Mutes
k	*t*	*p*	Mutes

* The aspiration is not found as a separate letter, but only in close combination with the mutes, forming the aspirated mutes *gh*, *dh*, *bh*, and (probably by later development) *kh*, *th*, *ph*. These aspirates, though historically they are independent and important members of the system of spoken sounds, I have not given separately in the scheme, because phonetically they are compound, containing the aspiration as a distinctly audible element following the mute.

These are the sounds which are distinguished from one another by the most marked differences, which our organs most readily utter, and which are most universally found in human speech: all others are of later origin, having grown out of these in the course of the phonetic changes which words necessarily undergo, as they pass from one generation's keeping to another's. Our race has learned, as we may truly express it, by long ages of practice, of both mouth and ear, what the child now learns, by imitation and instruction, in a few months or years: namely, to add to its first easy utterances others more nicely differentiated, and produced by a greater effort of the organs. In like manner, starting from the mere rudiments of expression in radical monosyllables, the tribes of our family have acquired, through centuries and thousands of years of effort, the distinction and designation of innumerable shades of meaning, the recognition and representation of a rich variety of relations, in the later wealth of their inflective tongues—resources which, being once won, the child learns to wield dexterously even before he is full grown. It will be our next task to review the steps by which our language advanced out of its primitive monosyllabic stage, by which it acquired the character of inflective speech. To follow out the whole process in detail would be to construct in full the comparative grammar and history of the Indo-European dialects—a task vastly too great for us to grapple with here; we can only direct our attention to some of the principal and characteristic features of the development.

The first beginning of polysyllabism seems to have been made by compounding together roots of the two classes already described, pronominal and verbal. Thus were produced true forms, in which the indeterminate radical idea received a definite significance and application. The addition, for example, to the verbal root *vak*, 'speaking,' of pronominal elements *mi*, *si*, *ti* (these are the earliest historically traceable forms of the endings: they were probably yet earlier *ma*, *sa*, *ta*), in which ideas of the nearer and remoter relation, of the first, second, and third persons, were already distinguished, produced combinations *vakmi*, *vaksi*,

vakti, to which usage assigned the meaning 'I here speak,' 'thou there speakest,' 'he yonder speaks,' laying in them the idea of predication or assertion, the essential characteristic which makes a verb instead of a noun, just as we put the same into the ambiguous element *love*, when we say *I love*. Other pronominal elements, mainly of compound form, indicating plurality of subject, made in like manner the three persons of the plural: they were *masi* (*ma-si*, 'I-thou,' i.e. 'we'), *tasi* (*ta-si*, 'he-thou,' i.e. 'ye'), and *anti* (of more doubtful genesis). A dual number of the same three persons was likewise added; but the earliest form and derivation of its endings cannot be satisfactorily made out. Thus was produced the first verbal tense, the simplest and most immediate of all derivative forms from roots. The various shapes which its endings have assumed in the later languages of the family have already more than once been referred to, in the way of illustration of the processes of linguistic growth: our *th* or *s*, in *he goeth* or *goes*, still distinctly represents the *ti* of the third person singular; and in *am* we have a solitary relic of the *mi* of the first. Doubtless the tense was employed at the outset as general predicative form, being neither past, present, nor future, but all of them combined, and doing duty as either, according as circumstances required, and as sense and connection explained; destitute, in short, of any temporal or modal character; but other verbal forms by degrees grew out of it, or allied themselves with it, assuming the designation of other modifications of predicative meaning, and leaving to it the office of an indicative present. The prefixion of a pronominal adverb, *a* or *ā*, the so-called "augment," pointing to a 'there' or 'then' as one of the conditions of the action signified, produced a distinctively past or preterit tense. Although only very scanty and somewhat dubious traces of such an augment-preterit (aorist or imperfect) are found in any languages of the family beside the Aryan and the Greek, it is looked upon as an original formation, once shared by them all. Again, the repetition of the root, either complete, or by "reduplication," as we term it, the repetition of its initial part, was made to indicate symboli-

cally the completion of the action signified by the root, and furnished another past tense, a perfect: for example, from the root *dā*, 'give,' Sanskrit *dadāu*, Greek *dedōka*, Latin *dedi;* from *dhā*, 'put, make,' Greek *tetheika*, Old High-German *tëta*, Anglo-Saxon *dide*, our *did*. This reduplicated perfect, as is well known, is a regular part of the scheme of Greek conjugation; in the Latin, not a few of the oldest verbs show the same, in full, or in more or less distinct traces; the Mœso-Gothic has preserved it in a considerable number of verbs (for example, in *haihald*, 'held,' from *haldan*, 'hold;' *saislep*, 'slept,' from *slepan*, 'sleep'); in the other Germanic dialects it is nearly confined to the single word *did*, already quoted. Moods were added by degrees: a conjunctive, having for its sign a union-vowel, *a*, interposed between root and endings, and bearing perhaps a symbolical meaning; and an optative, of which the sign is *i* or *ia* in the same position, best explained as a verbal root, meaning 'wish, desire.' From this optative descends the "subjunctive" of all the Germanic dialects. The earliest future appears to have been made by compounding with the root the already developed optative of the verb 'to be,' *as-yâ-mi;* for 'I shall call,' then, the language literally said 'I may be calling' (*vak-s-yâ-mi*). Of primitive growth, too, was a reflexive or "middle" voice, characterized by an extension of the personal endings, which is most plausibly explained as a repetition of them, once as subject and once as object: thus, *vak-mai*, for *vak-ma-mi*, 'call-I-me,' i.e. 'I call myself:' it was also soon employed in a passive sense, 'I am called'—as reflexives, of various age and form, have repeatedly been so employed, or have been converted into distinct passives, in the history of Indo-European language.* Other secondary forms of the verb, as intensives, desideratives, causatives, were created by various modifications of the root, or compositions with other roots; yet such verbal derivatives have played only a subordinate part in the develop-

* The Latin passive, for instance, is of reflexive origin, as is that of the Scandinavian Germanic dialects. Among modern European tongues, the Italian is especially noticeable for its familiar use of reflexive phrases in a passive sense: thus, *si dice*, 'it says itself,' for 'it is said.'

ment of the languages of our family, and need not be dwelt upon here. Of more consequence is the frequent formation of a special theme for the present tense, to which was then added a corresponding imperfect, made by means of the augment. This was accomplished in various ways: either by vowel-increment (as in Greek *leipō*, from *lip*, 'leave'), by reduplication (as in Greek *dadāmi*, from *dā*: the repetition of the root doubtless indicated repetition or continuity of the action), or by the addition or even insertion of formative elements (as in Greek *deiknumi* from *dik*, 'point out,' Sanskrit *yunajmi* from *yuj*, 'join;' Greek *gignōscō*, Latin *gnosco*, from *gnā*, 'know'); these last are, at least in part, noun-suffixes, and the forms they make are by origin denominatives.

Of this system of primitive verbal forms, produced before the separation of the family into branches, almost every branch has abandoned some part, while each has also new forms of its own to show, originated partly for supplying the place of that which was lost, partly in order to fill up the scheme to greater richness, and capacity of nicer and more varied expression. The Greek verb is, among them all, the most copious in its wealth, the most subtle and expressive in its distinctions: it has lost hardly anything that was original, and has created a host of new forms, some of which greatly tax the ingenuity of the comparative philologist who would explain their genesis. The Latin follows not very far behind, having made up its considerable losses, and supplied some new uses, by combinations of secondary growth: such are its imperfect in *bam*, its future in *bo*, and its derivative perfects in *ui* and *si*, in all of which are seen the results of composition with the roots of the substantive verb. Both these are greatly superior to the Sanskrit, in copiousness of forms, and in preciseness of their application. The Germanic verb was reduced at one period almost to the extreme of poverty, having saved only the ancient present, which was used also in the sense of a future, and a preterit, the modern representative of the original reduplicated perfect; each of the two tenses having also its subjunctive mood. The existing dialects of the branch have supplied a

host of new expressions for tense and mood by the extensive employment of auxiliaries, which, in their way, afford an admirable analytic substitute for the old synthetic forms. To trace out and describe in full the history of the Indo-European verb, in these and in the other branches of the family, showing the contractions and expansions which it has undergone, down even to such recent additions as the future of the Romanic tongues, and our own preterit in *d* (the reason and method of whose creation have been explained above, in the third lecture), would be a most interesting and instructive task; but it is one which we may not venture here to undertake.

To follow back to its very beginnings the genesis of nouns, and of the forms of nouns, is much more difficult than to explain the origin of verbal forms. Some nouns—of which the Latin *vox* (*voc-s*), 'a calling, a voice,' and *rex* (*reg-s*), 'one ruling, a king,' are as familiar examples as any within our reach—are produced directly from the roots, by the addition of a different system of inflectional endings; the idea of substantiation or impersonation of the action expressed by the root being arbitrarily laid in them by usage, as was the idea of predication in the forms of the verb. The two words we have instanced may be taken as typical examples of the two classes of derivatives coming most immediately and naturally from the root: the one indicating the action itself, the other, either adjectively or substantively, the actor; the one being of the nature of an infinitive, or abstract verbal noun, the other of a participle, or verbal adjective, easily convertible into an appellative. Even such derivatives, however, as implying a greater modification of the radical idea than is exhibited by the simplest verbal forms, appear to have been from the first mainly made by means of formative elements, suffixes of derivation, comparable with those which belong to the moods and tenses, and the secondary conjugations of the verb. Precisely what these suffixes were, in their origin and primitive substance, and what were the steps of the process by which they lost their independence, and acquired their peculiar value as modifying elements, it is not in most cases feasible to tell.

But they were obviously in great part of pronominal origin, and in the acts of linguistic usage which stamped upon them their distinctive value there is much which would seem abrupt, arbitrary, or even perhaps inconceivable, to one who has not been taught by extensive studies among various tongues how violent and seemingly far-fetched are the mutations and transfers to which the material of linguistic structure is often submitted—on how remote an analogy, how obscure a suggestion, a needed name or form is sometimes founded. Verbal roots, as well as pronominal, were certainly also pressed early into the same service: composition of root with root, of derived form with form, the formation of derivative from derivative, went on actively, producing in sufficient variety the means of limitation and individualization of the indeterminate radical idea, of its reduction to appellative condition, so as to be made capable of designating by suitable names the various beings, substances, acts, states, and qualities, observed both in the world of matter and in that of mind.

This class of derivatives from roots was provided with another, a movable, set of suffixes, which we call case-endings, terminations of declension. Where, as in the case of our two examples *vox* and *rex*, the theme of declension was coincident with the verbal root, the declensional endings themselves were sufficient to mark the distinction of noun from verb, without the aid of a suffix of derivation. They formed a large and complicated system, and were charged with the designation of various relations. In the first place, they indicated case, or the kind of relation sustained by the noun to which they were appended to the principal action of the sentence in which it was used, whether as subject, as direct object, or as indirect object with implication of meanings which we express by means of prepositions, such as *with*, *from*, *in*, *of*. Of cases thus distinguished there were seven. Three of them distinctly indicated local relations: the ablative (of which the earliest traceable form has *t* or *d* for its ending: thus, Sanskrit *açvāt*, Old Latin *equod*, 'from a horse') denoted the relation expressed by *from*; the locative (with the ending *i*), that expressed by *in*; the instrumental (with

the ending *ā*), that expressed by *with*, or *by*—the idea of adjacency or accompaniment passing naturally into that of means, instrument, or cause. Two cases, the dative and genitive, designated relations of a less physical character: the former (with the ending *ai*) we should render by *for* before the noun; the latter (its ending is *asya* or *as*) expressed general pertinence or possession. Then the accusative (with the sign *m*) assumed the office of indicating the directest dependent relation, that which even with us is expressed without the aid of a preposition—the objective—as well as that most immediate relation of motion which we signify by *to*. The nominative, finally, has also its ending, *s*, in the presence of which is strikingly exhibited the tendency of the earliest Indo-European language to make every vocable a true form, to give to every theme, in every relation, a sign of its mode of application, a formative element. Besides these seven proper cases, the vocative or interjectional case, the form of address, also makes a part of the scheme of declension; it has no distinctive ending, but is identical with the theme or the nominative case, or is only phonetically altered from them.

The declensional endings which we have instanced are those of the singular number. To explain their origin in any such way as shows us their precise value as independent elements, and the nature of the act of transfer by which they were made signs of case-relations, is not practicable. Pronominal elements are distinctly traceable in most of them, and may have assumed something of a prepositional force before their combination. The genitive affix is very likely to have been at the first, like many genitive affixes of later date in the history of the Indo-European languages, one properly forming a derivative adjective: and it is not impossible that the dative ending was of the same nature.

There are many existing tongues which have for the plurals of their nouns precisely the same case-endings as for the singular, only adding them along with a special pluralizing suffix. The attempt has been made* to find such a

* By Professor Schleicher, in his Compendium of Indo-European Comparative Grammar.

plural-suffix also among the plural endings of our earliest nouns, but with only faint and doubtful success; if these are actually of composite derivation, the marks of their composition are hidden almost beyond hope of discovery. We must be content to say for the present, at least, that the suffixes of declension indicate by their differences the distinctions of number as well as of case. And, among the nouns as well as the verbs of the primitive language, not only a plural, but also a dual, was distinguished from the singular by its appropriate endings, which are of not less problematical derivation, and, in the earliest condition of speech that we can trace, much fewer in number, being limited to three.

One other distinction, that of gender, was partially dependent for its designation upon the case-endings. We have already (in the third lecture) had occasion to refer to the universal classification of objects named, by the earliest language-makers of our family, according to gender, as masculine, feminine, or neuter—a classification only partially depending upon the actual possession of sexual qualities, and exhibiting, in the modern dialects which have retained it, an aspect of almost utter and hopeless arbitrariness. Nor, as was before remarked, is it possible even in the oldest Indo-European tongues to trace and point out otherwise than most dimly and imperfectly the analogies, apparent or fanciful, which have determined the grammatical gender of the different words and classes of words: such is the difficulty and obscurity of the subject that we must avoid here entering into any details respecting it. It appears that, in the first place, from the masculine, as the fundamental form, certain words were distinguished as possessed of feminine qualities, and marked by a difference of derivative ending, often consisting in a prolongation of the final vowel of the ending; while to all the derivatives formed by certain endings like qualities were attributed. The distinction was doubtless made in the beginning by the endings of derivation alone, those of case having no share in it; but it passed over to some extent into those of case also, the feminine here again showing a tendency to broader and fuller forms.

The separation of neuter from masculine was both later in origin and less substantially marked, having little to do with suffixes of derivation, and extending through only a small part of the declensional endings (it is mainly limited to the nominative and accusative).

This system of Indo-European declension has suffered not less change in the history of the various branches of the family than has that of conjugational inflection. The dual number was long ago given up, as of insignificant practical value, by most of the branches: the oldest Aryan dialects exhibit it most fully; it also makes some figure in ancient Greek; but even the most antique Germanic tongues have a dual only in the personal pronouns of the first and second persons; and the Latin shows but the faintest traces of it (in the peculiar nominative and accusative endings of *duo*, 'two,' and *ambo*, 'both'). As regards, again, the cases, the complete scheme only appears in the Indian and Persian; and even there the process of its reduction has begun, by the fusion, in one or another number, and in one or another class of words, of two cases into one—that is to say, the loss of the one as a distinct form, and the transference of its functions to another. In the oldest known condition of the classic tongues, this process has gone yet farther; in Latin, the locative and instrumental are thus fused with the dative and ablative; and in Greek, the genitive and ablative have been also compressed into one. The oldest Germanic dialects have nominative, accusative, genitive, and dative; with traces of the instrumental, which the later tongues have lost. But the modern development of the prepositions, and their rise to importance as independent indicators of the relations formerly expressed by the case-endings, has brought with it a yet more sweeping abandonment of the latter. We, in English, have saved a single oblique case, the ancient genitive, so restricting its use at the same time as to make a simple "possessive" of it—and further, among the pronouns, an accusative or "objective" (*me*, *us*, etc., and *whom*); in the Romanic languages, the noun has become wholly stripped of case-inflection. In what manner we have rid ourselves of the distinctions of

grammatical gender has been shown in a previous lecture (the third): we still keep up a linguistic distinction of natural gender by the use of our generic pronouns of the third person, *he*, *she*, and *it*; the modern Persian has abandoned even that, and the consideration of sex no longer enters into it in any way, save in the vocabulary, in the use of such words as *son* and *daughter*, *bull* and *cow*. Of the other modern tongues of the family, some, like these two, have eliminated from their grammatical systems the distinctions of gender; some, like the French, have reduced the three genders to two, by effacing the differences of masculine and neuter; but the larger part, like the German, still faithfully adhere to the inherited distinction of masculine, feminine, and neuter, so long ago established.

The ancient Indo-European language made no difference, as regarded declension, between its two classes of nouns, nouns substantive and nouns adjective. In their genesis, the two are but one; the same suffixes, to no small extent, form both; each passes by the most easy and natural transfer into the other; whether a given word indicating the possession of quality should be used attributively or predicatively, or as an appellative, was a question of subordinate consequence. The pronouns, also, both substantive and adjective, were inflected by a declension mainly corresponding, although marked by some peculiarities, and tending earlier to irregular forms.

With conjugation and declension, the subject of grammatical structure is, in fact, as good as exhausted: everything in language is originally either verb or noun. To the other parts of speech, then, which have been developed out of these, we shall need to give but a brief consideration.

Adverbs, the most ancient and necessary class of indeclinable words, or particles, are by origin, in the earliest stage of language as in the latest, forms of declension, cases of substantives, or adjectives, or pronouns. We have seen already how our adverbs in *ly* were elaborated out of former oblique cases (instrumentals) of adjectives in *lîc* ('like'); so also the usual adverbial ending *ment* of the Romanic languages is the Latin ablative *mente*, 'with mind' (thus,

French *bonnement*, 'kindly,' is *bonâ mente*, 'with kind intent'); the *ōs* which forms Greek adverbs (for example, *kakōs*, 'ill,' from *kakos*, 'bad') is the original ablative case-ending: and we are doubtless to infer that both the general classes of adverbs, made by means of apparent adverbial suffixes, and the more irregular and obscure single words, of kindred meaning and office, which we trace in the earliest vocabulary of the family, are of like derivation. Those parts of speech which we call prepositions were originally such, not in our present understanding of the term, but according to its etymological signification; they were adverbial prefixes to the verb, serving to point out more clearly the direction of the verbal action; it was only later, and by degrees, that they detached themselves from the verb, and came to belong to the noun, furthering the disappearance of its case-endings, and assuming their office. The earliest of them, as was to be expected from their designation of direction, trace their origin chiefly to pronominal roots; but in part, also, they come from verbal. Conjunctions, connectives of sentences, are almost altogether of comparatively late growth; the earliest style was too simple to call for their use: we have seen examples already (in the third lecture) of the mode in which they were arrived at, by attenuation of the meaning of words possessing by origin a more full and definite significance. Other products of a like attenuation, made generally at a decidedly modern date, are the articles: the definite article always growing out of a demonstrative pronoun; the indefinite, out of the numeral *one*.

The interjections, finally, however expressive and pregnant with meaning they may be, are not in a proper sense parts of speech; they do not connect themselves with other words, and enter into the construction of sentences; they are either the direct outbursts of feeling, like *oh! ah!* or else, like *st! sh!* mere "vocal gestures," immediate intimations of will—in both cases alike, substitutes for more elaborate and distinct expression. They require, however, to be referred to here, not merely for the sake of completeness, but also because many words come to be employed only

interjectionally which were once full parts of speech; even a whole phrase being, as it were, reduced to a single pregnantly uttered exclamation: examples are *alas!* that is, *O me lasso*, 'oh weary me!' *zounds!* 'I swear by *God's wounds*,' *dear me!* that is, *dio mio*, 'my God!' and many others.

Such are, compendiously and briefly stated, the steps by which Indo-European language was developed out of monosyllabic weakness into the wealth and fertility of inflective speech. At what rate they went on, how rapid was the growth after its first inception, we know not, and we can hardly hope ever to know. The conditions of that primitive period, and the degree in which they might have been able to quicken the now sluggish processes of word-combination and formation, are so much beyond our ken that even our conjectures respecting them have—at least as yet—too little value to be worth recording. What may have been the numbers of the community which laid the foundation of all the Indo-European tongues, and what its relation to other then existing communities, are also points hitherto involved in the deepest obscurity. But we know that, before the separation, whether simultaneous or successive, of this community into the parts which afterward became founders of the different tongues of Europe and south-western Asia, the principal part of the linguistic development had already taken place—enough for its traces to remain ineffaceable, even to the present day, in the speech of all the modern representatives of the family: the inflective character of Indo-European language, the main distinctions of its parts of speech, its methods of word-formation and inflection, were elaborated and definitely established.

But, though we cannot pretend to fix the length of time required for this process of growth, in terms of centuries or of thousands of years, we can at least see clearly that it must have gone on in a slow and gradual manner, and occupied no brief period. Such is the nature of the forces by which all change in language has been shown to be effected, that anything like a linguistic revolution, a rapid and sweeping modification of linguistic structure, is wholly impossible—and most especially, a revolution of a construct-

ive character, building up a fabric of words and forms. Every item of the difference by which a given dialect is distinguished from its ancestor, or from another dialect having the same ancestry, is the work of a gradual change of usage made by the members of a community in the speech which they were every day employing as their means of mutual communication, and which, if too rapidly altered, would not answer the purposes of communication. It takes time for even that easiest of changes, a phonetic corruption or abbreviation, to win the assent of a community, and become established as the law of their speech: it takes decades, and even generations, or centuries, for an independent word to run through the series of modifications in form and meaning which are necessary to its conversion into a formative element. That the case was otherwise at the very beginning, we have not the least reason for believing. The opinion of those who hold that the whole structure of a language was produced "at a single stroke" is absolutely opposed to all the known facts of linguistic history; it has no inductive basis whatever; it rests upon arbitrary assumption, and is supported by *à priori* reasoning. There must have been a period of some duration—and, for aught we know, it may have been of very long duration—when the first speakers of our language talked together in their scanty dialect of formless monosyllables. The first *forms*, developed words containing a formal as well as a radical element, cannot have come into existence otherwise than by slow degrees, worked out by the unconscious exercise of that ingenuity in the adaptation of means to ends, of that sense for symmetry, for finished, even artistic, production, which have ever been qualities especially characterizing our division of the human race. Every form thus elaborated led the way to others: it helped to determine a tendency, to establish an analogy, which facilitated their further production. A protracted career of formal development was run during that primitive period of Indo-European history which preceded the dispersion of the branches: words and forms were multiplied until even a maximum of synthetic complexity, of fullness of inflective wealth, had been reached, from which there has

been in later times, upon the whole, a gradual descent and impoverishment.

Here we must pause a little, to consider an objection urged by some linguistic scholars of rank and reputation against the truth of the views we have been defending, as to the primitive monosyllabism of Indo-European language, and its gradual emergence out of that condition—an objection which has more apparent legitimacy and force than any of those hitherto noticed. It is this. In ascending the current of historical development of the languages of our family, say the objectors, instead of approaching a monosyllabic condition, we seem to recede farther and farther from it. The older dialects are more polysyllabic than the later: where our ancestors used long and complicated forms, we are content with brief ones, or we have replaced them with phrases composed of independent words. Thus, to recur once more to a former example, for an earlier *lagamasi* we say *we lie;* thus, again, for the Latin *fuisset,* the French says simply *fût,* while we express its meaning by four distinct words, *he might have been.* Modern languages are full of verbal forms of this latter class, which substitute syntactical for substantial combinations. The relations of case, too, formerly signified only by means of declensional endings, have lost by degrees this mode of expression, and have come to be indicated by prepositions, independent words. This is what is well known as the "analytical" tendency in linguistic growth. Our own English tongue exhibits its effects in the highest known degree, having reduced near half the vocabulary it possesses to a monosyllabic form, and got rid of almost all its inflections, so that it expresses grammatical relations chiefly by relational words, auxiliaries and connectives: but it is only an extreme example of the results of a movement generally perceptible in modern speech. If, then, during the period when we can watch their growth step by step, languages have become less synthetic, words less polysyllabic, must we not suppose that it was always so; that human speech began with highly complicated forms, which from the very first have been undergoing reduction to simpler and briefer shape?

This is, as we have confessed, a plausible argument, but it is at the same time a thoroughly unsound and superficial one. It skims the surface of linguistic phenomena, without penetrating to the causes which produce them. It might pass muster, and be allowed to determine our opinions, if the analytical tendency alone had been active since our knowledge of language began; if we had seen old forms worn out, but no new forms made; if we had seen words put side by side to furnish analytic combinations, but no elements fused together into synthetic union. But we know by actual experience how both synthetic and analytic forms are produced, and what are the influences and circumstances which favour the production of the one rather than of the other. The constructive as well as the destructive forces in language admit of illustration, and have been by us illustrated, with modern as well as with ancient examples. Both have been active together, during all the ages through which we can follow linguistic growth. There have never been forms which were not undergoing continual modification and mutilation, under the influence of the already recognized tendencies to forget the genesis of a word in its later application, and then to reduce it to a shape adapted to more convenient utterance; there was also never a time when reparation was not making for this waste in part by the fresh development of true forms out of old materials. Nor has the tendency been everywhere and in all respects downward, toward poverty of synthetic forms, throughout the historic period. If the Greek and Latin system of declension is scantier than that of the original language of the family, their system of conjugation, especially the Greek, is decidedly richer, filled up with synthetic forms of secondary growth; the modern Romanic tongues have lost something of this wealth, but they have also added something to it, and their verb, leaving out of view its compound tenses, will bear favourable comparison with that which was the common inheritance of the branches. Some of the modern dialects of India, on the other hand, having once lost, in the ordinary course of phonetic corruption, the ancient case-terminations of the Sanskrit, have replaced them by a new scheme, not

less full and complete than its predecessor. The Russian of the present day possesses in some respects a capacity of synthetic development hardly, if at all, excelled by that of any ancient tongue. For example, it takes the two independent words *bez Boga*, 'without God,' and fuses them into a theme from which it draws a whole list of derivatives. Thus, first, by adding an adjective suffix, it gets the adjective *bezbozhnüĭ*, 'godless;' a new suffix appended to this makes a noun, *bezbozhnik*, 'a godless person, an atheist;' the noun gives birth to a denominative verb, *bezbozhnichat*, 'to be an atheist;' from this verb, again, come a number of derivatives, giving to the verbal idea the form of adjective, agent, act, and so on: the abstract is *bezbozhnichestvo*, 'the condition of being an atheist;' while, once more, a new verb is made from this abstract, namely *bezbozhnichestvovat*, literally 'to be in the condition of being a godless person.' A more intricate synthetic form than this could not easily be found in Greek, Latin, or Sanskrit; but it is no rare or exceptional case in the language from which we have extracted it; it rather represents, by a striking instance, the general character of Russian word-formation and derivation.

It is obviously futile, then, to talk of an uninterrupted and universal reduction of the resources of synthetic expression among the languages of the Indo-European family, or to allow ourselves to be forced by an alleged pervading tendency toward analytic forms into accepting synthesis, inflective richness, as the ultimate condition of the primitive tongue from which they are descended. If certain among them have replaced one or another part of their synthetic structure by analytic forms, if some—as the Germanic family in general, and, above all, the English—have taken on a prevailingly analytic character, these are facts which we are to seek to explain by a careful study of the circumstances and tendencies which have governed their respective development. If, moreover, as has been conceded, the general bent has for a long time been toward a diminution of synthesis and a predominance of analytic expressions, another question, of wider scope, is presented us for solution; but the form in which it offers itself is this: why should the forces which

produce synthetic combinations have reached their height of activity during the ante-historic period of growth, and have been gradually gained upon later, at varying rates in different communities, by those of another order? We do not in the least feel impelled to doubt the historic reality of the earliest combinations, their parallelism, in character and origin, with those which we see springing up in modern times. That we now say analytically *I did love*, or *deal*, or *lead* is no ground for questioning that our ancestors said compositely *I love-did, deal-did, lead-did*, and then worked them down into the true synthetic forms *I loved, dealt, led.* The cause which produced the different nature of the two equivalent expressions *I loved* and *I did love*, composed, as they are, of identical elements, was a difference in habit of the language at the periods when they were respectively generated. Any language can do what it is in the habit of doing. We can turn almost any substantive in our vocabulary into a *quasi* adjective—saying *a gold watch, a grass slope, a church mouse*, and so on—because, through the intermediate step of loose compounds like *goldsmith, grasshopper, churchman*, we have acquired the habit of looking upon our substantives as convertible to adjective uses without alteration and without ceremony. Neither the Frenchman nor the German can do the same thing, simply because his speech presents no analogies for such a procedure. We, on the other hand, like the French, have lost the power to form compounds with anything like the facility possessed by the ancient tongue from which ours is descended and by some of its modern representatives, as the German; not because they would not be intelligible if we formed them, but because, under the operation of traceable circumstances in our linguistic history, we have grown out of the habit of so combining our words, and into the habit of merely collocating them, with or without connectives. Now we have only to apply this principle upon a wider scale, and under other conditions of language, in order to find, as I think, a sufficient answer to the question which is engaging our attention. When once, after we know not how long a period of expectation and tentative effort, the formation of words by

synthesis had begun in the primitive Indo-European language, and had been found so fruitful of the means of varied and distinct expression, it became the habit of the language. The more numerous the new forms thus produced, the greater was the facility of producing more, because the material of speech was present to the minds of its speakers as endowed with that capacity of combination and fusion of which the results in every part of its structure were so apparent. But the edifice after a time became, as it were, complete; a sufficient working-apparatus of declensional, conjugational, and derivative endings was elaborated to answer the purposes of an inflective tongue; fewer and rarer additions were called for, as occasional supplements of the scheme, or substitutes for lost forms. Thus began a period in which the formative processes were more and more exclusively an inheritance from the past, less and less of recent acquisition; and as the origin of forms was lost sight of, obscured by the altering processes of phonetic corruption, it became more and more difficult to originate new ones, because fewer analogies of such forms were present to the apprehension of the language-makers, as incentives and guides to their action. On the other hand, the expansion of the whole vocabulary to wealth of resources, to the possession of varied and precise phraseology, furnished a notably increased facility of indicating ideas and relations by descriptive phrases, by groups of independent words. This mode of expression, then, always more or less used along with the other, began to gain ground upon it, and, of course, helped to deaden the vitality of the latter, and to render it yet more incapable of extended action. That tendency to the conscious and reflective use of speech which comes in with the growth of culture especially, and which has already been repeatedly pointed out as one of the main checks upon all the processes of linguistic change, cast its influence in the same direction; since the ability to change the meaning and application of words, even to the degree of reducing them to the expression of formal relations, is a much more fundamental and indefeasible property of speech than the ability to combine and fuse them bodily together. Then, when

peculiar circumstances in the history of a language have arisen, to cause the rapid and general decay and effacement of ancient forms, as in our language and the Romanic, the process of formative composition, though never wholly extinct, has been found too inactive to repair the losses; they have been made up by syntactical collocation, and the language has taken on a prevailingly analytic character.

These considerations and such as these, I am persuaded, furnish a satisfactory explanation of the preponderating tendency to the use of analytic forms exhibited by modern languages; as they also account for the greatly varying degree in which the tendency exhibits itself. But even should they be found insufficient, this would only throw open for a renewed investigation the question respecting the ground of the tendency; the general facts in the history of earliest development of our languages would still remain sure, beyond the reach of cavil, since they are established by evidence which cannot be gainsaid, contained in the structure of the most ancient forms. We are compelled to believe that the formative processes which we see going on, in decreasing abundance, in the historically recorded ages of linguistic life, are continuations and repetitions of the same constructive acts by which has been built up the whole homogeneous structure of inflective speech.

One more theoretic objection to the doctrine of a primitive Indo-European monosyllabism we may take the time to notice, more on account of the respectability of its source than for any cogency which it in itself possesses. M. Renan, namely,* asserts that this doctrine is the product of a mistaken habit of mind, taught us by the artificial scholastic methods of philosophizing, and leading us to regard simplicity as, in the order of time, anterior to complexity; while, in fact, the human mind does not begin with analysis; its first acts being, on the contrary, complex, obscure, synthetic, containing all the parts, indistinctly heaped together. To this claim respecting the character of the mental act we may safely yield a hearty assent; but, instead of inferring

* In his work on the Origin of Language, seventh chapter.

from it that "the idea *expressed itself* at the beginning with its whole array of determinatives and in a perfect unity," and that hence, "in the history of languages, synthesis is primitive, and analysis, far from being the natural form of the human mind, is only the slow result of its development," we shall be conducted to a precisely contrary conclusion. The synthetic forms which we are asked to regard as original have not the character of something indistinctly heaped together; they contain the clear and express designation of the radical idea and of its important relations; they represent by a linguistic synthesis the results of a mental analysis. The idea is, indeed, *conceived* in unity, involving all its aspects and relations; but these cannot be separately *expressed* until the mind has separated them, until practice in the use of language has enabled it to distinguish them, and to mark each by an appropriate sign. In *amabor*, the (Latin) word cited as an example of synthesis, are contained precisely the same designations as in the equivalent English analytic phrase, '*I shall be loved:*' *ama* expresses 'loving;' *bo* unites future-sign and ending designating the first person; and the *r* is the sign of passivity. Who can possibly maintain that a system of such forms, gathered about a root, exhibits the results of experience, of developed acuteness, in thought and speech, any less clearly than the analytic forms of our English conjugation? The two are only different methods of expressing the same "array of determinatives." The first synthetic mental act, on the contrary, is truly represented by the bare root: there all is, indeed, confused and indiscrete. The earliest radical words, when first uttered, stood for entire sentences, expressed judgments, as undeniably as the fully elaborated phrases which we now employ, giving every necessary relation its proper designation. It is thus that, even at present, children begin to talk; a radical word or two means in their mouths a whole sentence: *up* signifies 'take me up into your lap;' *go walk*, 'I want to go out to walk,' or 'I went to walk,' or various other things, which the circumstances sufficiently explain; but forms, inflections, connectives, signs of tense and mode and condition, they do not learn to use until later, when their minds have acquired

power to separate the indistinct cognition into its parts. M. Renan, in short, has made a very strange confusion of analytic style of expression with mental analysis: all expression of relations, whether by means that we call synthetic or analytic, is the result and evidence of analysis; and his own thesis respecting the complexity in obscurity of unpractised and uninstructed thought brings us directly to a recognition of the radical stage of Indo-European language as the necessary historical basis of its inflective development.

This development, it may be remarked in conclusion, has been gradual and steadily progressive, being governed in both its synthetic and analytic phases by the same causes which universally regulate linguistic growth, and which have been here repeatedly set forth or referred to: namely, on the one hand, the traditional influence of the stores of expression already worked out and handed down, consisting in the education given by them to thought, and the constraining force exerted by their analogies; and, on the other hand, the changing character and capacity, the varying circumstances and needs, of the community of speakers, during the different periods of their history. It has experienced no grand revolution, no sudden shift of direction, no pervading change of tendency. There is no cleft, as is sometimes assumed, parting ancient tongues from modern, justifying the recognition of different forces, the admission of different possibilities, in the one and in the other. Nor are we to regard the energies of a community as absorbed in the work of language-making more at one period than at another. Language-making is always done unconsciously and by the way, as it were: it is one of the incidents of social life, an accompaniment and result of intellectual activity, not an end toward which effort is directed, nor a task in whose performance is expended force which might have been otherwise employed. The doctrine that a race first constructs its language, and then, and not till then, is ready to commence its historic career, is as purely fanciful as anything in the whole great chapter of *à priori* theorizings about speech. No living language ever ceases to be constructed, or is less rapidly built upon in ages of historic activity: only the style

of the fabric is, even more than the rate, determined by external circumstances. It is because the very earliest epochs of recorded history are still far distant from the beginnings of Indo-European language, as of human language generally, that we find its peculiar structure completely developed when it is first discovered by our researches. We have fully acknowledged the powerful influence exerted by culture over the growth of language: but neither the accident of position and accessibility to other nations that at a certain time brings a race forward into the light of record, and makes it begin to be an actor or a factor in the historic drama, nor its more gradual and independent advance to conspicuousness in virtue of acquired civilization and political power, can have any direct effect whatever upon its speech. The more thorough we are in our study of the living and recent forms of human language, the more rigorous in applying the deductions thence drawn to the forms current in ante-historic periods, the more cautious about admitting forces and effects in unknown ages whereof the known afford us no example or criterion, so much the more sound and trustworthy will be the conclusions at which we shall arrive. It is but a shallow philology, as it is a shallow geology, which explains past changes by catastrophes and cataclysms.

NOTES.

LECTURE I. p. 16, l. 31. *I guess* is used by Chaucer.

P. 20, l. 23. *It calls a donkey and a mule, . , a horse*, &c. See Farrar's 'Chapters on Language,' ch. iii. p. 33.

P. 27, l. 32. '*It omits endings and confounds forms altogether. It says foots and mouses.*'

What children now do our forefathers also did. Such forms as *my* and *thy* are good instances of omission of case-endings, the older forms being *mine* and *thine* (O.E. *mi-n* and *thi-n*). We find too in M.E. many weak forms of verbs that have failed however to drive out the older strong forms; as, *blowed, growed, shined*, &c.

The plural *foots* actually occurs in the Romance of Sir Gawayne and the Green Knight.

Pences, in 'two six-*pences*,' is as bad as *mouses*. *Ki-ne, children*, and *brethren* are double plurals. (See 'Elementary Lessons in Historical English Grammar,' p. 73.)

P. 28, l. 39. *Doubt* is not a good example of the dropping of a letter. The word came to us through Norman-French, and in our older writers is written as *doute*. The *b* has been inserted under the notion that it came to us directly from the Latin. For the same reason the *b* has been inserted in *dette;* the *c* in *victuals*, &c.

P. 29, l. 4. *alms* occurs in Early English under the form *ælmesse*. In the Tudor period it is found under the form *almous, almes*, &c.

P. 29, l. 31-2. *spake* and *spoke*. The preterit *spake* is more archaic than *spoke;* the former arose out of O.E. spræc. The Northern dialect of Middle English kept the form in *a;* in the Southern dialect the form in *o* (like the passive particle) was preferred. To the same class as *spake* belong *bare* and *bore, brake* and *broke, stale* and *stole, tare* and *tore*.

The participial forms in *o* have no doubt tended to the preservation of the preterits in *o*, leading to the disuse of the older forms *spake, brake*, &c.

There is no doubt, too, that such past tenses as *bit, bid* (together with the archaic forms *rid, smit, ris, writ*), are due to the passive participle. Also *hung, wrung, bound, found*, &c.

P. 29, l. 17. See 'Historical Outlines of English Accidence,' p. 74.

P. 30, l. 1. *its*. New possessive forms are very common. They are, of course, modelled upon older and more correct forms.

After the model of *mine* and *thine* have sprung up in our local dialects *hisn, hern, ourn*, &c.

So too *she's* follows the formation of *his*, while the Hampshire *shism* (= *hers*) is like *hisn*, &c.

P. 30, l. 34. *wrought—worked.* The co-existence of two forms of the same word, or doublets, as they have been called, is very common in English. The preservation of these double forms is due to each having acquired a different meaning. Cp. *clothes* and *cloths*, *pennies* and *pence*, *cows* and *kine*, &c., *waggon* and *wain*, *morrow* and *morning*.

P. 30, l. 38, 39. *Words change their shape without losing their identity.* Not only do they change their shape but they lose their meaning. Cp. our *knave* with O.E. *cnapa*, a boy; *orchard* with O.E. *ort-geard*, herb-garden, &c.

Lecture II. p. 38, l. 27. *scooner.* The American origin of the word *scooner* is very doubtful. It is probably an altered form of the Dutch *schuyner*.

P. 39, l. 1. Words for proper names are very common. Cp. *macadamize*, from *McAdam*, who died in 1835. See Trench, 'Study of Words.'

P. 40, l. 33. *reliable*, cp., too, *unspeakable.* Milton has *speakable*, 'Par. Lost,' ix. i. 648. See Horne Tooke's 'Diversions of Purley,' p. 667, ed. 1860: "By the importation of *ble* or *able* into the language we have gained a manifest advantage. Indeed, this termination, because eminently useful, has become so familiar even to the most illiterate of our countrymen, that by the force of analogy alone they frequently apply it (and with perfect propriety, too, as to its signification) to words originally English."

P. 42, l. 30. *laugh*, *cough.* The passing of the guttural *gh* (originally *h*) into *f*, and even into *th*, is of long standing, and was not confined to *laugh*, *cough*, *rough*, *tough*, &c. In M.E. we find *thof*, *thurf* = *though*, *through*. Cp. the following versions of the same lines from the Cursor Mundi, p. 678, ll. 11823-4:

Wit the crache him tok the *scurf*,
The fester thrild his body *thurgh*.—(Cotton text.)
Wid the crache him toke the *skurth*,
The festre thrilled his body *thurgh*.—(Göttingen text.)

P. 56, ll. 18, 19. For other compounds of this kind see a list in 'Hist. Outlines of Eng. Accidence,' p. 77.

P. 57, l. 21. *fear-ful.* In Middle English we find *willesful* = full of will, = *wilful*. See 'Specimens of Early English,' I. *a*. 79.
There is a large number of nouns ending in *ful*, as *hand-ful*, &c. These words had once an adjective use and did not form their plural in *s*. See Elementary Lessons in English Historical Grammar, p. 78.
Notice how the force of *ful* in *fulfill* is weakened. It once meant to *fill to the full*. See Hampole's 'Pricke of Conscience,' p. 15.

P. 58, l. 35. The suffix *ley* in the word *barley* had once a longer form—*lic*. There was an O. English *bere-lic* = barley; *bere* is an old word for *barley*, and *-lic* is the same suffix as in *gar-lick*, *hem-lock*, and is another form of the word *leek* (O.E. *leac*, an herb).

P. 60, l. 16. For other suffixes that can be plainly traced to independent words, see 'Historical Outlines of English Accidence,' p. 218.

P. 62, l. 23. *duplicate.* The word *duple* is not uncommon in Tudor English. It comes directly from the Latin, while *double* and other forms in *-ble* come from Latin through Norman-French. In some M.E. works the word *double* is itself used as a suffix instead of *-ble* or *-fold*. See 'The Book of the Knight La Tour-Landry.' So 'an hundred double' = *an hundredfold* (p. 113); 'an hundred sithes double' (p. 144) = *an hundredfold* (literally, 'an hundred times double').

P. 62, l. 1 from bottom. AM. In Old English we find *beo-m*, I be.

P. 64, l. 8. *Formative elements* arise through agglutination or collocation,

where the second of two terms is *subordinate* to the other. The *frequency* of the employment of any particular word in a compound has, of course, much to do with its becoming merely formal.

P. 64, l. 27. *true.* The verb to *trow*, with its noun *troth*, and verb betroth (O.E. *trûw-ian*), and the adjective *tri-m* (O.E. *tru-m*), contain the same root. Cp. Lat. *dur-us*, Sansk. *dhru-va*, firm.

P. 65, l. 23. *No word is unformed.* This statement applies of course only to the very oldest forms of the Aryan languages.

P. 66, l. 21. *hateful* is not an old compound. The O.E. is *hetol;* cp. O.E. *forgitol* = *forgetful.* We find also *hatelich* in Early English (= O.E. *hetelic*, hateful). *Hateful*, like *forgetful*, is of very late formation.

P. 70, l. 31. *did.* This is a reduplicated verb. O.E. *dide;* Sansk. *dadhau.*

P. 70, l. 15—17. *Composition opens a wide field to the operation of phonetic change.* The root is the accented syllable in the Teutonic languages; suffixes and prefixes, being unaccented, are liable to fall away. (See 'Hist. Outlines,' p. 76.)

P. 72, l. 33. *bos'n.* Cp. *good-bye* = *God b' wi' ye* = God be with you; *topsy-turvy* = *top si' t' o'r way* = topside that other way.

Cp. *wig* for *perriwig*, *bus* for *omnibus*, *cab* for *cabriolet*, *mob* for *mobile.*

Hail! from the old expression "wes (*be*), thu (*thou*), hâl (*hale*)," or "*wes hal!*" which still exists in *wassail.*

P. 79, l. 1. The *vowel-change* of *a* to *e* and *o* to *e* or *i* is not limited to the plural of nouns, we find it in other words. Cp. *tell* with *talk*, *sell* with *sold;* *food* with *feed*, *doom* with *deem;* *gold* with *gilden;* *fox* with *vixen*, &c.

P. 79, l. 23. *nation* and *nation-al.* Cp. *goose* and *gos-ling*, *stripe* and *strip-ling*, *dear* and *darling.*

P. 82, l. 11. The *Germanic preterits.* See 'Historical Outlines,' ch. xiii. p. 264.

P. 84, l. 21. Derivatives or compounds made up of elements belonging to different languages are called *hybrids.* See 'Historical Outlines,' p. 39.

P. 85, l. 8. The 'tendency to efface the distinction of form between the imperfect and participle' is seen in *bit* from the passive participle instead of the older *boot* or *bote.* Hence such forms as *rid*, *ris*, *writ*, *smit.*

P. 85, l. 31. *put.* Verbs of this kind, to which belong *rid*, *set*, *cast*, &c., once had a distinct form for the *past tense.* See 'Elementary Lessons in Hist. Eng. Grammar,' pp. 154, 155.

P. 86, l. 1. *lear-n*, originally to be *lered*, is a passive form of the verb *lere*, O.E. *læran.*

P. 86, l. 5. We are obliged to give a *causative sense* to many intransitive verbs, and thereby render them transitive, because we have now no inflexions by which intransitive verbs may be made causative. The verbs *make* (in M.E. *do* and *let*), and *cause*, are sometimes used for this purpose.

In O.E. we have a few *causative* verbs derived from intransitive verbs; as, *fell* from *fall*, *set* from *sit*, *raise* from *rise.* The suffix that caused this vowel-change has been lost.

P. 86, l. 24. *shall.* This verb originally meant, (1) to fail, be guilty, (2) to owe, to be obliged. It has this secondary meaning in the second and third persons. Cp. 'You *should* behave better.'

Will once meant to *desire*, *wish.* Cp. Latin *volo.*

P. 86, l. 33. *Loss of subjunctive endings.* The vowel *e* throughout the singular, and *en* or *on* throughout the plural, are the only inflexions that belonged to the subjunctive mood in the oldest English.

P. 93, ll. 9—11. *s* (for *th*) as the ending of the third person singular of verbs in Chaucer's time was limited to the Northern dialects, and Chaucer uses it only when imitating the Northerner's dialect. It made its appear-

ance before the Norman Conquest in that form of the Northumbrian speech preserved to us in the Lindisfarne Glosses.

P. 93, l. 16. *r=s.* Cp. *forlorn* (=O.E. *forloren*, M.E. *forlosen*); *frore* (=O.E. *froren*) = *frozen*; *are* = *ase*.

P. 93, l. 21. The *gh*, in words like *light*, *laugh*, &c., was originally *h*, pronounced something like German *ch*. Cp. *next* = O.E. *nehst*; also M.E. *hext* = O.E. *hehst*; *buxom* = M.E. *bughsom*, O.E. *buhsum*. In M.E. we find *lixtow* = *liest thou*, &c.

P. 93, l. 21. *troth* = *trough*. See note to p. 42, l. 30.

P. 93, l. 28. F = *th*. Cp. Gr. θηρ, Lat. *fera*, Eng. *deer*.

P. 93, l. 29. P = QU (= K). Cp. Lat. *quatuor*, and O.E. *fether* (= four).
K = T. Cp. *mate* = M.E. *make*; *bat* = M.E. *bakke*; cp. *fetch*, M.E. *fette*; *scratch* = M.E. *scratte*.

P. 93, l. 36. Interchange of *r* and *l*. Cp. Lat. *marmor* and English *marble*.

P. 93, ll. 38, 39. *Assimilation*. Cp. *best* = O.E. *bet-st*; *last* = *lat-st*; *gossip* = *god-sib*, &c.

P. 101, ll. 6, 7. Cp. O.E. *cnapa*, M.E. *knafe*, a boy, which is our knave, though all its old meaning is gone. In M.E. *page* is also used for 'a *boy*.'

P. 104, ll. 8—12. "The Romans called the *elephant* 'the Lucanian *ox*,' not being at first familiar with its name, and knowing of no animal larger than the ox; the *giraffe* they styled *camelopardus*, from its points of resemblance to the camel and the leopard, and *ovis fera* (or foreign sheep), from the mildness of its disposition; and they knew the *black lion* by the synonym of 'Libyan bear.' The Dutch could find no better name than bosjesbook, *bush-goat*, for the graceful African antelope; and in the Spanish name *alligator* we see that they regarded that unknown river monster as a *large lizard*." See Farrar's 'Chapters on Language,' ed. 1865, p. 33.

How easily a word may come to be transferred to something altogether different to its earliest use is seen in the word *bead*. The introduction of *prayer* from the Norman-French rendered the English *bede* (prayer) useless, but it was not allowed to go out of use, but was transferred to the trinkets used for counting the *beads* or prayers. See Prologue to Chaucer's Canterbury Tales, l. 159.

P. 105, l. 14. The proper name *Wright* carries us back to M.E. *wright*, a carpenter. (See Chaucer's *Prologue*, l. 614.) The original meaning was *workman*. Cp. wheel-*wright*, play-*wright*. In E.E. we had *bread-wright* = baker.

P. 106, l. 2. *Kaisir*. This word occurs in M.E.

P. 107, l. 28. *post* = messenger in Shakespeare's *Richard II*. It is also used as an adverb, = quickly, cp. in *post haste*.

P. 107, l. 34. *head*. Cp. the use of other parts of the names of other parts of the body; as, the *leg* of a stool, *neck* of a bottle, *arm* of a chair, or of the sea. See Farrar's 'Chapters on Language,' p. 213.

P. 108. l. 13. *be* in *become* is another form of *by*. It is often written for *by* in M.E.

P. 108, l. 28. *kind*. The original meaning is seen in *kin*; and in '*kindly* fruits of the earth' in the English Prayer Book.

P. 109, l. 1. *second*. Before we adopted *second* from the Norman-French *that other* was the English equivalent. The original meaning of *other* was *one of two*, the first or the second, but mostly restricted to the *second*. Cp. 'every *other* day.'

P. 111, ll. 14—35. Cp. *to* and *too*, *through* and *thorough*, *waggon* and *wain*, *morrow* and *morning*.

P. 111, ll. 36—38. On the use of *metaphors* in language, see pp. 204—246 of Farrar's 'Chapters on Language.'

P. 113, l. 5. *under*. This word is cognate with Latin *inter*. Cp. *under that* in E.E. for between that, in the mean time.

P. 113, l. 16. *Forgive* = to give up entirely. *For*, like Latin *per*, has an *intensitive* signification (cp. *pardon* and *forgive*; *perjure* and *forswear*).

P. 113, l. 38. *queer*, 'crosswise,' occurs in the Early English period.

P. 114, l. 31. '*the more, the merrier*.' The word *the* in this phrase is now an adverb; originally it was the instrumental case of the definite article *the*. See 'Historical Outlines,' p. 126, 199.

P. 115, l. 6. *Or* is a contraction of M.E. *other*, *auther*, *outher* (any one of two). *Either* is another form of *other*.

P. 115, l. 7. *again* = O.E. *ongegn*, Ger. *ent-gegen*. The prefix *and*, against, exists in *an-swer*, *a-long* (O.E. *and-lang*, M.E. *end-long*).

P. 115, l. 18. *body*. Our compounds of *body* rose up in the Middle English period. In *Piers Plowman* we find *nobody*, but before this we had such phrases as a '*doughty body*;' cp. '*busy-body*.' See *Elementary Lessons*, p. 123.

P. 116, l. 2. *stood* = was, occurs in *Macbeth*.

P. 116, l. 38. *dout* is still a provincialism for *do out*, i. e. put out.

P. 117, l. 22. *d* = *did*. This is proved by a reference to the Gothic forms of the perfect of weak verbs, in the plural of which the full form occurs.

P. 118, l. 2 *have*. In O.E. *have* was not used as a mere tense sign. The participle after *have* was put in the *accusative* case.

P. 119, l. 11. '*on the point of*' occurs in M.E., as a sign of the future tense.

P. 119, l. 35. *to* before the simple infinitive is only a sign of the mood; before the gerundial infinitive it is a real preposition, and *for* may often be substituted for it. Cp. 'a house *to let*' = 'a house *for* letting.'

P. 131, l. 1. *Caoutchouc*. The Lancashire man calls it *woad-eater*, because it *eats* away marks made by *woad* or *black-lead*.

P. 140, l. 17. *graph*. Becon uses *psalmograph* for a psalmist. O.E. *salm-wrihte*.

P. 140, l. 26. • *ism*. Cp. *arch* in Shakespeare as a distinct word, 'My worthy *arch*.'

P. 143, ll. 13—17. The prefixes *dis*, *re*, and the suffixes *-ment*, *-ess*, &c., are added to Teutonic roots. Cp. *dislike*, *renew*, *atonement*, *shepherdess*, *talkative*, &c.

P. 143, l. 29. *Composition*. See 'Historical Outlines,' p. 221.

P. 146, l. 14. *rock oil*. Old Walton uses *oil peter*. Cp. *salt peter*.

P. 147, l. 7. *The inaptness for internal development*. This is owing to the fact that our language has lost very many of its original root-words altogether, while others occur only in compounds and derivatives and can no longer be used by themselves. Cp. *orchard*, *steadfast*, *gossip*, &c.

P. 147, l. 12. See 'Historical Outlines,' p. 31, and 'Elementary Lessons,' p. 12, 13.

P. 171, l. 9. *Scottish and Yorkshire*. These are one and the same dialect, descended from the Old Northumbrian. We have only to compare Hampole's 'Pricke of Conscience' with Barbour's 'Brus' to see that the Yorkshire dialect of the former is identical in all essential points with the Scottish of the latter.

P. 195, ll. 11—13. *Cheval and equus*. Cp. Fr. *tête*, Ital. *testa* for Lat. *caput*. The original meaning of *testa* was an earthen pot.

P. 259, ll. 26—35. Traces of the root i exist in O.E. *eo-de*, went, Gothic *i-ddja*, Lat. *i-re*, Gr. *lέναι*, to go. We find *ga* in Gr. *ἔβα*, *βέ-σομαι*; *gam* (to go), in Gr. *βαίνω*, Lat. *ven-io*, English *come*.

AK (swift), sharp.

English: edge (O.E. ecgge), eye (O.E. eage), n-ag (O.E. ehu).

Latin: aceo, acer, accerbus, acidus, acies, acus, acuo, occa, ocior, aqua, equus, acc-i-piter, acu-ped-ius, ociter.

Greek: ἀκή, ἀκίς, ἀκμή, ἄκρος, ἄκρις, ὄκρις, ὀξυς, ὠκύς.

STA (standing).
English: stand, stead, stem, staff, stiff, stuff, steer, stall, stool, stove, stow, stare, stark, stopple, stake, stock, &c.
German: stehen, stand, stall, stelle, stätte, stier, stark, stuhl, stange, stock, stengel, steif, stoppel, stütze, &c.
Latin: stare, statuo, sisto, stamen, statim, statio, ve-stibulum, interstia, ju-sti-tium, sol-sti-tium, de-sti-na, ob-sti-no, stiva, stipes, stipula, stagnum, stultus, stolidus, sterilis, obstaculum, stauro, restauro, taurus, locus (= stlocus), præ-stolor.
Greek: στάμεναι, στατος, στατήρ, δύστηνος, στερέος, στερρός, στεῖρα, στέριφος, στήλη, στόχος, στάχυς, στελλω, στάλη, στάλ-ιξ, στιφρό-ς, στύ-ω, στυ-λος, στοά, σταυρό-ς, στέφω, στέμμα.

SAD (sitting).
English: sit, seat, set, settle, sad.
German: sitzen, setzen, sitz, satz, sessel, siedeln.
Latin: sedeo, sedes, sella, sessio, de-ses, desidia, obses, residuus, sedatio.
Greek: ἕζομαι (= σεδομαι), ἕδος, ἕδρα.

KI, SKI (lying, sleeping).
English: hive, hind, home, while.
German: heim, weile.
Latin: civis, quies, tran-qui-llus, cælebs, cubo, cumbo, cubiculum, incubo.
Greek: κεῖμαι, κώμη, κοί-τη, κέμμα, κτίζω, κτίσις, κτίλος.

PAD (walking).
English: foot, fetch, fast, fetter.
German: fuss, feste, fest, fassen, fessel.
Latin: pes, pessum, pedalis, pedica, compes, op-pidum, impedire, pestis, pestilentia, acupedius, pedester, pedule.
Greek: πέδη, πούς, πέδον, εμ-πεδ-ον, πεδίον, πεζός, πέζα.

VAS (staying, dwelling).
English: was, past tense of O.E. *wesan*, to be.
German: wesen.
Greek: ἄστυ, ἑστία, ἡνς, ἀστεῖος, ἀστός.
Latin: verna, vernaculus, curia (= covisia), vena, veneo, venum-do, vendo.

SAK (following).
English: seek.
Latin: sequor, socius, sequax, secundus, sculna, sacer, sancio, adsecla.
Greek: ἕπομαι, ἑπ-έ-της, ὅπ-λον.

AN (blowing).
Old English: æðm, O. Norse önd, and M.E. (breath).
German: odem.
Latin: anima, animus, animal.
Greek: ἄνεμος, ἀσθμα, ἀτμος.

VART (turning).
English: worth, worthy, to-wards.
German: werden, werth.
Latin: verto, verso, vertigo, divortium, de-orsum, prosus (= prorsus).
Greek: ῥατάνη (= βρατ-άνη), ὄρτύξ.

SAR, SAL, SARP (going, creeping).
English: sallow, salt, salve.
German: sal-weide, salz, salbe, salben.
Latin: salio, saltare, serum, in-sul-a, salix, salignus, sal, salinus, repo, reptilis, serpo, serpens.
Greek: ὀρ-μή, ὅρμος, ὀρός, ἀφ-ορμή, ἅλλομαι, ἅλμα, ἅλ-σις, ἁλτήρ, σέλ-αχος, ἑλίκη, ἁλι-εύς, ἅλιος, ἕρπω, ἕρψις.

PAT (flying).
English: feather, find.
German: feder, finden.

Latin: peto, petitio, petulans, penna, perpes, compitum, pæpes, accipiter, impetus.
Greek: πέτομαι, πόταμος, πτέρον, ὀκυ-πέτ-ης, πτ-ίλον, πτῶσις.

PLU (flowing).
English: flow, flood, fleet, float.
German: fliessen, fluten, fluss, floss, flotte.
Latin: pluit, pluvius, ploro, exploro, linter (=plunter), plaustrum, plostrum.
Greek: πλύνω, πλῦμα, πλόος, πλυτός.

AD (eating).
English: eat. O.E. æs (food).
German: essen.
Latin: edere, inedia, edax, esurio, esca.
Greek: ἔδω, ἔδμεναι, ἐδανόν, νήστειρα (=νη-εστήρ), εἶδαρ, ἐδ-ωδ-ή.

PA (drinking).
Latin: bibere, bibulus, imbuere, potor, potio, potus, poculum.
Greek: πίνω, πιτος, -ποτηρ, πόσις, πότος, πῶμα, πῖνον.

VAK (speaking).
German: er-wähnen.
Latin: vox, vocare, præco (onis), invito, vagio, vapulo, vacca, convicium.
Greek: εἶπον, ὄπα, ἔπος (root Fεπ, Fακ), ὄψ.

DHA (putting).
English: do, deed, doom, deem.
German: thun, that, thum.
Latin: *-do* in condo, credo, &c. *f.* in Lat. represents a more original *dh*, hence *dha* occurs in fa-ber, facere, -ficere, -fecto, pro-fic-iscor, famulus.
Greek: τίθημι, θέμα, θέ-σις, θεσμός, θέμις, θήκη.

DA (giving).
Latin: dare, dator, proditor, donum, dos, damnum, indemnis, &c.
Greek: δόμεναι, δοτός, δοτηρ, δωτις, δῶρον, δόμα.

There are traces of another root, *da*, to divide; in *Latin*, daps, dens; *Greek*, δανος, δαινυμαι, δαίτυς, δατέομαι, ὀδούς, δάπτω, δαπάνη, δεῖπνον; *English*, tooth; *German*, zahn, ziefer (O.E. tibr, tifr).

LABH (taking).
Latin: rabere, rabidus, robur, labor.
Greek: λάφυρον, λαμβανω, λάβρος, λαβή.

GARBH (holding).
English: calf; *German*, kalb.
Greek: βρέφος, δέλφις, δόλφος, ἀ-ῥρειφνα.
Latin: germen, germanus, gremium, grex, egregius, &c.

DIK, DAK (pointing out).
English: teach, token.
German: zeichen, zeihen.
Latin: dico, dicto, disco, doceo, index, ju-dex, vin-dex, decus, digitus, dignus, &c.
Greek: δείκνυμι, δίκη, δεικτήριος, προδέκτωρ, διδασκω, διδαχή, δάκτυλος.

BHAR (bearing).
English: bear, bairn, barm (lap), birth, burden, bread, brother, barley.
German: Geburt, bürde, brod, bruder, bahre.
Latin: fero, fur, ferax, fertilis, farina, feretrum, refriva, fors, far [impro]-per-ium, pro-br-um, frater, fors, fortuna.
Greek: φέρω, φαρέτρα, φώρ, φόρμα, φόρτος, φερνή.

KAR (making).
O.E. *hrif* in mid-riff.
Latin: creare, crescere, cre-ber, cri-nis, corpus, cerus, caerimonia.
Greek: κραίνω, κηρός, κηρίον, αὐτο-κρά-τωρ.

TA, TAN (stretching).

English : thin, thunder.
German : dünn, donner.
Latin : tenere, tendere, tunica, ta-berna, tonsillæ, tentare, temptare, tener, tenuis, protinus, tonare, tonitrum.
Greek : τάνυειν, τείνειν, τατος, τάσις, τόνος, ταναός.

SKI, SKIDH, SKANDH (dividing).
English : shed, skill, shiver, sickle, scatter, shun.
German : scheiden, schindel, sichel, sachte.
Latin : cædere, cælum, cæsa, scandula, scindo, calamitas, scire, sciscere, scissura, cædes, cæ-spes, cæmentum ; *akin, are,* secare, secula, serra, segmen, securis, serra, insicia, sica, cuniculus, canalis, saxum.
Greek : σχάζω, σχίζω, σκέδη, σχινδ-αλμός, σχῆμα, σχάω, σχίσις, κήδω, κεδνός, κίνδυνος.

DAR, DAL (dividing).
English : *to* tear, tree, dole, deal.
German : zerren, theil.
Latin : dolium, dolere, delere.
Greek : δέρω, δέρος, δαίρω, δέρμα, δάρσις, δάρις, δορά, δρῦς, δρυμός, δελτός, δηλεομαι.

BADH, BANDH (binding).
English : bind, band, bond, body, boddice, bed, bundle.
German : binden, bett, bast, bottich, bündel.
Latin : offendix, fidelia, fides, perfidus, foedus, funis.
Probably Greek πενθερός, πεῖσμα belong to this root.

STAR (strewing).
English : strew, strow, stream, storm, star, strand.
German : streuen, streu, strom, stern.
Latin : sternere, stratus, storea, struere, lecti-sternium, stramen, stella, stellio, torus, consternare, indu-stria, strenuus, strages, stragulus, struma.
Greek : στρώνυμι, στόρνυμι, στρατός, στρῶμα, στρῶμνή, ἀ-στήρ, ἄ-στρον, στέρνον.

PAL, PAR, PUR (filling).
English : fill, full, foal, filly, folk.
German : füllen, fohlen, viel, volk.
Latin : pluo, plenus, pellio, pelvis, plus, populus, supp ementum, plebes, publicus, amplus.
Greek : πίμπλημι, πόλις, πῶλος, πλήθω, πλοῦτος.

MAR (rubbing). See Max Müller's 'Lectures on the Science of Language,' vol. ii. p. 347.

BHÂ (shining).
Latin : fari, fa-ma, infans, fanum, facundus, fenestra, fateor, foveo, favilla, focus, fastus.
Greek : φαίνω, φώς, φανερός, φανός, φαλός, φάλαρα, φάος, φημί, φωνή, φαινόμενον, φαντασία, φάσις, φάσμα.

BHU (growing, being).
English : be, bower, busk, beam (originally a *tree*).
German : bauen, baum, beule.
Latin : fui, fio, folium, follis, faveo, faustus, fenum, feles, felix, fecundus.
Greek : φύω, σ-φεός, φύτον, φύσις, φῦμα, φύλλον, φύλη, φῶς.
The *-ba, -bo,* -v, in *-bam, -bo, -vi, ui,* are altered forms of *fu* in fu-i, *fo* in *fore ; -s* in *scrip-si* (cp. Greek aorists and futures in *-σα,-σω*) is the *s* in *sum.* Cp. Eng. *is,* Ger. *sein.*

P. 274, l. 24. *Instrumental case.* In Old English nouns this case had the same form as the dative ; but in the pronouns there was a distinct form, as in *tht* the instrumental case of the definite article, still existing in 'so much *the* better ; *the* more *the* merrier :' *why* and *how* are instrumental cases of *who, what.*

P. 276, l. 34. *Adverbs.* Cf. *-um*, a dative ending of nouns (plural) and of adjectives in Old English, which exists in *whilom*, *seldom*.

P. 276, l. 9. *Prepositions.* Many prepositions still retain (especially in composition) much of their original *adverbial* character. Cf. *by* (= *be*), *for* and *fore*, *of*, *off*, *under*, *-gain* and *again*.

P. 276, l. 2. *Conjunctions.* Nearly all the English conjunctions are derivative. Many *adverbs* used as connectives have become conjunctions; and there are many late formations, as *because*, *in order that*, *to the end that*, *nevertheless*, *for as much as*, *in order to*, &c. (See 'Elementary Lessons in English Historical Grammar, ch. xiii.')

TABLE I.

INDO-EUROPEAN OR ARYAN LANGUAGES.

(See Chap. VI.)

A. EUROPEAN DIVISION.

- 1 KELTIC
  - (a) Cymric: (1) Welsh, (2) Old Cornish (dead), (3) Armorican.
  - (b) Gadhelic: (1) Irish or Erse, (2) Gælic, (3) Manx.
- 2 ITALIC or ROMANIC
  - (1) Old Latin dialects: Oscan, Umbrian, Latin, *from which have sprung*
  - (2) Romance languages: (1) Italian, (2) Langue d'Oc (dead), Langue d'Œil, or old Provençal, (4) French, (5) Spanish, (6) Portuguese, (7) Roumanish, (8) Wallachian.
- 3 HELLENIC or GRECIAN
  - (1) Ancient Greek dialects: Doric, Æolic, Ionic, Attic, *from which have sprung*
  - (2) Modern Greek and its dialects.
- 4 TEUTONIC
  - (a) Low German: (1) Gothic (dead), (2) English, (3) Old Saxon (dead), (4) Frisian, (5) Dutch and Flemish, (6) Platt-Deutsch.
  - (b) Scandinavian: (1) Danish, (2) Swedish, (3) Norwegian, (4) Icelandic.
  - (c) High German: Modern German with its older stages; Middle High German, and Old High German.
- 5 LETTIC or LITHUANIC
  - (1) Old Prussian (dead), (2) Lithuanian, (3) Lettish.
- SCLAVONIC
  - (1) Old Slavonic or Church Slavic, (2) Bulgarian, (3) Russian, (4) Kroatian, (5) Servian, (6) Slovenian, (7) Polish, (8) Bohemian, (9) Moravian, (10) Slovakian, (11) Sorbian or Lusatian dialects, (12) Polabian.

B. ASIATIC DIVISION.

- 1 INDIAN
  - (1) Sanskrit (dead), (2) Prakrit (dead), (3) Pali, (dead), (4) Modern Indian dialects (sprung from Sanskrit): Hindī, Hindustanī, Bengalī, Mahratti, Sinhalese, Gypsy.
- 2 IRANIAN
  - (a) Old Persian, Zend or Old Bactrian (dead), (2) Cuneiform inscriptions of the Achæmenidan sovereigns (dead), (3) Pehlevi or Huzvaresh (dead), (4) Parsi or Pazend (dead), (5) Modern Persian.
  - (b) (1) Armenian, (2) Ossetic, (3) Kurdish, (4) Afghan or Pushto.

TABLE II.

INDO-EUROPEAN NUMERALS.

CARDINALS.

	Sanskrit.	Greek.	Latin.	Gothic.	German.	English.
1	ê-ka	εἷς, ἕν, μια (f)	u-nu-s oi-no-s (old)	ai-ns	ei-n	o-ne
2	dwa (dvi)	δύω, δύο	duo	tvaí	zwei	two
3	tri	τρεῖς	tres	threis	drei	three
4	chatur	τέτταρες πισυρες	quatuor	fidwôr	vier	four
5	pañchan	πέντε πέμπε	quinque	fimf	fünf	five
6	shash	ἕξ	sex	saihs	sechs	six
7	saptan	ἑπτα	septem	sibun	sieben	seven
8	ashtan	ὀκτώ	octo	ahtau	acht	eight
9	navan	ἐννέα	novem	niun	neun	nine
10	dashan	δέκα	decem	taihun	zehn	ten
11	ekâ dashan	ἕνδεκα	undecim	ain-lif	elf	eleven
12	dwâ dashan	δώδεκα	duo-decim	twâ-lif	zwölf	twelve
20	vińshati	εἴ-κοσι	vi-ginti	twai-tigĸus	zwanzig	twenty
100	shata	ἑκατον	centum	taihun-tèhund	hundert	hund-red

REMARKS.

1 One. The Sanskrit ê-ka shows that the stem is *ai* and the root a demonstrative pronoun i = that. — Greek εἷς (= ἐν-ς) contains the stem *sam*, root **sa**, found in Lat. *sim-plex* (one fold), *semel*, *singuli*. Cf. Sansk. *sa-krit*, Gr. ἁ-παξ.

2 Two. Gr. δί = δίς (= Sansk. dvis), twice, and δί-α, through, originally *between* (= *by-twain*)—Lat. *bi-ni* = dvi-ni; *bis* = *dvis*.

3 Three. The root *three* is said to have signified originally *following* (two, cf. *second*), from the root *tar* or *tri*, to go beyond.

4 Four is said to be compounded of *cha* (and) + *twi* (three), i.e. one and three; or *cha* = *ka* = one + *twi* = *tvi*.

5 Five. There was an O.E. *fether* = four. Some derive this numeral from a root found in Sansk. pashch-ât (after, behind), the ablative of an adjective *pashcha* (= *pancha*, following). The old Lat. was *Pomtis*; cf. *Pontius*, *Pompejus*.

6 Six. The original form is seen in Zend *khśvas* (= *ksva-ksva*). Gr. ἕξ = Doric *Fέξ*.

7 Seven. This is perhaps connected with a root *sap*, to follow. Gr. ἑπω, Lat. *sequor*.

8 Eight is the dual of *four*.

9 Nine is probably connected with *new*; cf. Lat. *novus*. English *nine* has lost a *g*, representing a more original *v*.

10 Ten probably contains *dva* (two) and *ashtan* (8). Others connected it with the root *dak*, *dik*, to point out; cf. Gr. δάκ-τυλος.

11 Eleven is a compound in all the Indo-European languages = one + ten.—In English eleven = *en* (one) + *lev* = *lif* = *tig* = ten; —*tig* corresponds to Gr. —δεκα, Lat. —*decim*, Lithuanian —*lika*. Cf. English *twelve* = *twa* + *lif* = two + ten.

20 Twenty. English *twenty* contains *twain* and *ten* = 2 × 10. The Sansk. *vin-shati* = *dvi-dashati*. Gr. εἰ-κοσι = *ἐί-κοτι* = *Fεί-κατι* = *Fί-κατι*. Lat. *vi-ginti* = *dvi-ginti* = *dvi-decinti*, (cf. τρια-κοντα and Lat. tri-ginti).

100. Hundred. The original form was *kan-ta*. Cf. Lat. centum, —cento, —gento, Gothic —*hunda*, O.S. *hunt*, Gr. ἑ in ἑκατον = *one*. The Gothic *tai-un*, *têh hund* = *taihun-taihund* = ten × ten.

TABLE III.

ORDINALS.

Sansk.	Greek.	Latin.	Gothic.	O.E.	German.	English.
1st pra tha-ma-s	πρῶ-το-ς	pri-mu-s	fru-m-s	for-ma	er-ste	first
2nd dwi-tîya-s	δεύ-τερο-ς	al-ter	an-thar-s	ô-ther	zwei-te, an-der	second
3rd tri-tîya-s	τρί-το-ς	ter-tiu-s	thri-dja	thry-dde	dri-tte	third
4th chatur-tha-s	τέταρ-το-ς	quar-tu-s	(fidwor-tha)	feor-tha	vier-te	fourth
5th pancha-ma-s	πεμπ-το-ς	quin-tu-s	(fimf-ta)	fif-ta	fünf-te	fifth
6th shash-sha-s	ἕκ-το-ς	sex-tu-s	saihs-ta	six-ta	sechs-te	sixth
7th septa-ma-s	ἕβδο-μος	septi-mu-s	(sebun-da)	seofo-tha	sieben-te	seventh
8th ashta-ma-s	ὄγδο-μας	octa-vu-s	ahtu-da	eahto-tha	ach-te	eighth
9th nava-ma-s	ἔννα-το-ς	non-u-s	niun-da	nigo-tha	neun-te	ninth
10th dasha-ma-s	δέκα-το-ς	deci-mu-s	taihun-da	teo-tha	zehn-te	tenth
20th vi-shati-tama-s	εἰκο-στό-ς	vice-simu-s		twentugo-tha	zwanzig-ste	twentieth

REMARKS.

1. Sansk. pra-thamas = pratamas, the superlative of a root *pra*, exists in Lat. *pro*, *præ*, *prius*, Eng. *fore* and *foremost*.
2. The words for second in Greek, Lat., &c., are comparative forms. Eng. *second* (of N. French origin) has altogether replaced the old *other*; cf. 'every *other* day.' The forms in *-thas*, *-mas*; *-tos*, *-μος*; *-tus*, *-mus*; *-tha*, *-ta*, are superlatives.

TABLE IV.

PERSONAL PRONOUNS.

1ST PERSON SINGULAR.

Sanskrit.	Greek.	Latin.	Gothic.	O.E.	German.	English.
Nom. aham	ἐγώ	ego	ik	ic	ich	I
Acc. mâm, mâ	ἐμέ, μέ	me	mik	mec,me	mich	me
Inst. mayâ						
Dat. mahyam, me	ἐμίν	mihi	mis	me	mir	me
Abl. mat, mattas	ἐμεῖο	me (med.)				
Gen. mama, me	ἐμου, μοῦ	mei	meina	mîn	mein	(mine)
Loc. mayi	ἐμοι, μοί	(mei)	(mis)			

2ND PERSON SINGULAR.

Sanskrit.	Greek.	Latin.	Gothic.	O.E.	German.	English.
Nom. twam	συ	tu	thu	thu	du	thou
Acc. tvâm, tvâ	σέ, τέ	te	thik	thec, the	dich	thee
Inst. tvayâ						
Dat. tubhyam, te	ϵτεῖν, τίν	tibi	thus	the	dir	thee
Abl. tvat, tvattas						
Gen. tava, te	τεοῖο σοῦ	tui	theina	thîn	dein	(thine)
Loc. tvayi	σοί	(tui)	(thus)			

1ST PERSON DUAL.

	SANSKRIT.	GREEK.	LATIN.	GOTHIC.	O.E.	GERMAN.	ENGLISH
Nom.	âvâm	νῶ, νωι		wit	wit		wanting
Acc.	âvâm, nau	νώ, νῶι		ugkis, ugk	unc		
Inst.	âvâbhyâm						
Dat.	âvabhyâm, nau	νῶιν, νῷν		ugkis	unc		
Abl.	âvâbhayâm						
Gen.	âvayos, nau			ugkara	uncer		
Loc.	âvayôs						

2ND PERSON DUAL.

	SANSKRIT.	GREEK.	LATIN	GOTHIC.	O.E.	GERMAN	ENGLISH
Nom.	yuvâm	σφω, σφῶι	wanting	(yut)	git	wanting	wanting
Acc.	yuvâm, vâm	σφώ, σφῶι		iggkwis	inc		
Inst.	yuvâbhyâm						
Dat.	yuvâbhyâm, vâm	σφῶιν σφῷν		iggkwis	inc		
Abl.	yuvâbhyâm						
Gen.	yuvayôs, vâm			igkwara	incer		
Loc.	yuvayôs						

ST PERSON PLURAL.

	SANSKRIT.	GREEK.	LATIN.	GOTHIC.	O.E.	GERMAN.	ENG.
Nom.	vayam asme	ἄμμες, ἡμεῖς	nos	wois ..	we	wir	we
Acc.	asmân, nas	ἄμμε, ἥμας	nos	unsis,uns	us, usic	uns	us
Inst.	asmâbhis						
Dat.	asmabhyam,nas	ἄμμιν, ἡμῖν	nobis	unzis,uns	us	uns	us
Abl.	asmat		nobis				
Gen.	asmâkam, nas	ἄμμέων, ἡμῶν	nostri	unsara	user, ure	unser	our
Loc.	asmâsu	(Æol. ἄμμεσιν)					

2ND PERSON PLURAL.

	SANSKRIT.	GREEK.	LATIN.	GOTHIC.	O.E.	GER.	ENG.
Nom.	yuy-am, yushmê	ὔμμες, ὑμεῖς	vos	jus	ge	ihr	ye
Acc.	yushmân vas	ὔμμε, ὑμεας, ὑμας	vos	izwis	eôwic, eôw	euch	you
Inst.	yushmâbhis						
Dat.	yushmâbhyam vas	ὔμμιν	vobis	izwis	eôw	euch	you
Abl.	yushmat	ὑμιν	vobis				
Gen.	yushmâkam vas	ὑμμέω, ὑμειων, ὑμῶν	vestri	izwara	eôwer	euer	(your)
Loc.	yushmâsu						

TABLE V.

DECLENSION OF NOUNS.

SINGULAR.

	SANSKRIT.	GREEK.	LATIN.
Nom.	vâk	ὄπ-ς	vox (= voc-s) voice
Gen.	vâch-am	ὄπ-α	voc-em
Inst.	vâch-â		
Dat.	vâch-e	ὄπ-ι	voc-i
Abl.	vâch-as		voc-e
Gen.	vâch-as	ὀπ-ός	voc-is
Loc.	vâch-i	ὄπ-ι	[voc-i]

DUAL.

Sanskrit.	Greek.	Latin
Nom. Acc. vâch-au	ὄπ-ε	wanting
Gen. Loc. vâch-os		
Dat. Abl. Inst. vâk-bhyâm [*Greek Gen. & Dat.*]	[ὀπ-ο-ῖν]	

PLURAL.

Sanskrit.	Greek.	Latin.
Nom. vâch-as	ὄπ-ες	voc-es
Acc. vâch-as	ὄπ-ας	voc-es
Inst. vâg-bhis		
Dat. Abl. vâg-bhyas	ὀπ-σί	voc-i-bus
Gen. vâch-âm	ὀπ-ῶν	voc-um
Loc. vâk-shu (= *Greek Dat.*)	ὀπ-σί	

SINGULAR.

Sanskrit.	Greek.	Latin.	Gothic.	O.E.	O.H.G.
Nom. ashvâ (mare)	χῶρα (land)	equa (mare)	giba(gift)	gifu(gift)	gëba (gift)
Acc. ashvâ-m	χώραν	equa-m	giba	gife	geba
Inst. ashva-y-â (*old* ashvâ)					
Dat. ashvâ-y-âi (*old* ashvâi)	χώρᾳ	equæ (*old* equâi)	gibai	gife	gëbo, gëbu
Abl. ashvâ-yâs		equâ (*old* equâd)			
Gen. ashvâ-yâs	χῶρα-ς	equâ	gibôs	gife	gëbô, gëbâ
Loc. ashvâ-y-âm	[χαμα-ί][1]	[Romæ][2]			
Voc. ashvê (*old* ashva)	χῶρα	equa	(giba-i)	gife	

Mod. Germ. has *gabe* throughout.

DUAL.

Sanskrit.	Greek.	Latin.	Gothic	O.E.	O.H.G.
Nom. Acc. ashve	χώρα		wanting	wanting	wanting
Gen. Loc. ashva-yos					
Dat. Abl. Inst. ashvâ-bhyam	χώρα-ιν				

PLURAL.

Sanskrit.	Greek.	Latin.	Gothic.	O.E.	O.H.G.
Nom. ashvâ-s (*old* ashvâ-sas)	χῶραι	equæ	gibô-s	gifa	gëbô, gëbâ
Acc. ashvâ-s	χώρα-ς	equa-s	gibô-s	gifa	gëbô, gëbâ
Inst. ashvâ-bhis					
Dat. ashvâ-bhyas	χώραισι	equa-bus	gibô-m	gifu-m	gëbô-m
Abl. ashvâ-bhyas	χώραις	equis			
Gen. ashvâ-n-am (*old* ashvâ-m)	χωρῶν	equa-rum	gibô	gifen-a	gëbô-n-ô
Loc. ashvâ-su					

[1] on the ground. [2] at Rome.

Mod. Germ. has *gaben* throughout.

TABLE VI.

CONJUGATION OF VERBS.

As, *to be.*

INDICATIVE MOOD. PRESENT TENSE.

		Sanskrit.	Greek.	Latin.	Gothic.	Old English.	German.	English.
Sing.	1.	as-mi	*εἰ-μί*	s-u-m	i-m	eo-m		a-m
	2.	a-si	*ἐσ-σί, εἶ*	es	is	ear-t		ar-t
	3.	as-ti	*ἐσ-τί(ν)*	es-t	is-t	is	ist	is
Dual.	1.	s-vas			(s-iju			
	2.	s-thas	*ἐσ-τον*		(s-ijuts)			
	3.	s-tâs	*ἐσ-τον*					
Plur.	1.	s-mas	*ἐσ-μέν*	s-u-mus	(s-ijum)	s-ind, s-indon, [ar-on]	s-ind	ar-e
	2.	s-tha	*ἐσ-τε*	es-tis	(s-ijuth)	s-ind, s-indon, [ar-on]	s-eit	ar-e
	3.	s-anti	*ἐ-ἁσι(ν), ἐ-ἰσίν*	s-unt	s-ind	s-ind, s-indon, [ar-on]	s-ind	ar-e

IMPERFECT TENSE.

		Sanskrit.	Greek.	Latin.	Gothic	Old. Eng.	German	English
Sing.	1.	âs-am	*ἦ-ν*	er-am	wanting	wanting	wanting	wanting
	2.	âs-îs	*ἦς, ἦσ-θα*	er-as				
	3.	âs-ît	*ἦν*	er-at				
Dual.	1.	âs-va						
	2.	âs-tam	*ἦ-τον (ητσ-τον)*					
	3.	âs-tâm	*ἦ-την*					
Plur.	1.	âs-ma	*ἦ-μεν*	er-amus				
	2.	âs-tha	*ἦ-τε*	er-atis				
	3.	âs-an	*ἦσ-αν*	er-ant				

Dâ, *to give.*

INDICATIVE MOOD. PRESENT TENSE.

		Sanskrit.	Greek.	Latin.
Sing.	1.	dadâmi	*δίδωμι*	do
	2.	dadâsi	*δίδως*	das
	3.	dadâti	*δίδωσι(ν)*	dat
Dual.	1.	dadvas		wanting
	2.	datthas	*δίδοτον*	
	3.	dattas	*δίδοτον*	
Plur.	1.	dadmas	*δίδομεν*	damus
	2.	dattha	*δίδοτε*	datis
	3.	dadati	*δίδόἁσι(ν), (διδοῦσι)*	dant

IMPERFECT.

	Sanskrit.	Greek.	Latin.
Sing.	1. a-dadâm	(ἐδίδων), ἐδίδουν	dabam
	2. a-dadâs	(ἐδίδως), ἐδίδους	dabas
	3. a-dadât	(ἐδίδω), ἐδίδου	dabat
Dual.	1. a-dadva		wanting
	2. a-dattam	ἐδίδοτον	
	3. a-dattâm	ἐδιδότην	
Plur.	1. a-dadma	ἐδίδομεν	dabamus
	2. a-datta	ἐδίδοτε	dabatis
	3. a-dadus	ἐδίδοσαν	dabant

AORIST.

	Sanskrit.	Greek.	Latin
Sing.	1. adâm	(ἔδων)	wanting
	2. adâs	(ἔδως)	
	3. adât	(ἔδω)	
Dual.	1. adâva		
	2. adâtam	ἔδοτον	
	3. adâtâm	ἐδότην	
Plur.	1. adâma	ἔδομεν	
	2. adâta	ἔδοτε	
	3. adus	ἔδοσαν	

REDUPLICATED PERFECT.

	Sanskrit.	Greek.	Latin.
Sing.	1. dâdau	δέδωκα	dedi
	2. dâditha	δέδωκας	dedisti
	3. dâdau	δέδωκε	dedit
Dual.	1. dâdiva		wanting
	2. dâdathus	δέδωκατον	
	3. dâdâthu	δεδώκατην	
Plur.	1. dâdîma	δεδώκαμεν	dedimus
	2. dada	δέδωκατε	dedistis
	3. dâdus	δέδωκασι(ν)	dederunt

SUBJUNCTIVE (SANSKRIT), OPTATIVE (GREEK).

	Sanskrit.	Greek.	Latin
Sing.	1. dâdyâm	διδοίην	wanting
	2. dâdyâs	διδοίης	
	3. dâdyât	διδοίη	
Plur.	1. dadyâma	διδοίημεν	
	2. dadyâta	διδοίητε, διδοῖτε	
	3. dadyus	διδοίησαν, διδοῖεν	

DHÂ, *to place.*

INDICATIVE MOOD. PRESENT TENSE.

	SANSKRIT.	GREEK.	OLD ENGLISH.	OLD HIGH GER.	ENGLISH.
Sing. 1.	dadhâmi	τίθημι	do	tuom	do
2.	dadhâsi	τίθης	dest	tuos	dost
3.	dadhâti	τίθησι(ν)	deth	tuot	doth, does
Dual. 1.	dadhvas	[wanting]	wanting	wanting	wanting
2.	dhatthas	τίθετον			
3.	dhattas	τίθετον			
Plur. 1.	dadhmas	τίθεμεν	dôth	tuomês	do
2.	dhatha	τίθετε	dôth	tuot	do
3.	dahati	τίθεῖσι(ν) τίθεᾶσι(ν)	dôth	tuont	do

PRETERITE TENSE.

	SANSKRIT.	GREEK.	OLD ENGLISH.	O. H. GER.	ENGLISH.
Sing. 1.	dadhau	τέθεικα	dide	tëtâ	did
2.	dadhitha, dadhâtha	τέθεικας	didest	tâti	didst
3.	dadhau	τέθεικε(ν)	dide	tëtâ	did
Dual. 1.	dadhiva		wanting	wanting	
2.	dadhathus	τέθεικατον			
3.	dadhatus	τέθεικατον			
Plur. 1.	dadhima	τέθεικαμεν	didon	tâtumes	did
2.	dadha	τέθεικατε	didon	tâtut	did
3.	dadhus	τέθεικᾶσι(ν)	didon	tâtun	did

VAH, *to carry.* English *wag.*

INDICATIVE MOOD. PRESENT TENSE.

	SANSKRIT.	GREEK.	LATIN.	GOTHIC.
Sing. 1.	vahâmi	ἔχω	veho	viga
2.	vahasi	ἔχεις (= ἐχεσι)	vehis	vigis
3.	vahati	ἔχει (= ἐχετι)	vehit	vigith
Dual. 1.	vahâvas		wanting	
2.	vahathas	ἔχετον		vigôs
3.	vahatas	ἔχετον		vigats
Plur. 1.	vahâmas	ἔχομεν	vehimus	vigam
2.	vahatha	ἔχετε	vehitis	vigith
3.	vahanti	ἔχοντι, ἔχουσι	vehunt	vigand

VID, to see.[1] English *wit.*

PRETERITE INDICATIVE.

	SANSKRIT.	GREEK.	LATIN.	GOTHIC.	OLD ENG.	ENGLISH.
Sing. 1.	ved-a	οἶδ-α	vidi	wait.	wat	wot
2.	vet-tha	οἶσ-θα	vidisti	waist	wâst	wost, wottest
3.	ved-a	οἶδ-ε	vidit	wait	wât	wot
Dual. 1.	vid-va		wanting	witu	wanting	wanting
2.	vid-athus	ἴσ-τον		wituts		
3.	vid-atus	ἴσ-τον				
Plur. 1.	vid-ma	ἴσ-μεν	vidimus	witum	witen	wit
2.	vid-a	ἴσ-τε	vidistis	wituth	witen	wit
3.	vid-us	ἴσ-ᾶσι	viderunt	witun	witen	wit

[1] The cognate forms show that English *wot* was originally a strong preterite tense, which after a time became used as a present. After a time a weak preterite was formed, viz. O.E. *wiste*, Eng. *wist*.

TABLE VII.

STATEMENT OF GRIMM'S LAW.

I. If the same roots or the same words exist in Sanskrit, Greek, Latin, Keltic, Slavonic, Lithuanian, Gothic,[1] and Old High German, then, wherever the Sanskrit or Greek has an *aspirate* the Gothic has the corresponding *soft* (*sonant*) mute.

II. If in Sanskrit, Greek, &c., we find a *soft* or *sonant* mute, then we find a corresponding *hard* (*surd*) mute in Low German, and a corresponding *aspirate* in High German.

III. If the six first-named languages show a *hard* or *surd* mute, the Gothic presents the corresponding *aspirate*, and Old High German the corresponding *soft* or *sonant* mute.

	Sanskrit, Greek, &c.	Gothic.	High German.
I.	aspirate	soft (sonant)	hard (surd)
II.	soft (sonant)	hard (surd)	aspirate
III.	hard (surd)	aspirate	soft (sonant)

TABLE OF COMPARATIVE SOUNDS.

Sanskrit.	Greek.	Latin.	Gothic and Low Germ. Languages.	Old High German.	Modern High German
gh	χ	h (g)	g	k	g
dh	θ	f (d, b)	d	t	t
bh	φ	f (b)	b	p	b
g	γ	g	k	ch (h)	ch (g)
d	δ	d	t	z, ss	s, z
b	β	b	p	f	f
k	κ	c	h (g, f)	h (g, k)	h
t	τ	t	th	d	d
p	π	p	f (b)	f (v)	f

[1] *Gothic* is here taken as the best representative of the Low German and Scandinavian dialects, and Old High German of the other division of the Teutonic languages.

ILLUSTRATIONS.

I. ASPIRATES.

	Greek.	Eng. (Low Ger.)	Old High German.
Gutturals.	χήν Lat. *anser* = *hanser*	goose	kans (Mod. Germ. *gans*)
Dentals.	θήρ (Lat. *fera*)	deor	tior (Mod. Germ. *thier* = *tier*)
Labials.	φηγός (Lat. *fagus*)	beech	puocha (Mod. Germ. *büche*)

II. SOFT (SONANT).

	Greek.	Eng. (Low Ger.)	Old High German.
Gutturals.	γένος (Lat. *genus*)	kin	chunni
Dentals.	δύο (Lat. *duo*)	two	zuei (Mod. Germ. *zwei*)
Labials.	κάνναβις	hemp	han-f

III. HARD (SURD).

	Greek.	Eng. (Low Ger.)	Old High German.
Gutturals.	καρδία. (Lat. *cor, cordis*)	heart	[1] herza (Mod. Germ. *herz*)
Dentals.	πούς (Lat. *pes, pedis*)	foot	[1] fuoz (Mod. Germ. *fuss*)
Labials.	τρίς (Lat. *tres*)	three	drî (Mod. Germ. *drei*)

ADDITIONAL ILLUSTRATIONS OF GRIMM'S LAW.

I. (1) *gh*, χ, *g*, *k*.

Sanskrit.	hyas (= ghyas)		lih				yah (carry)
Greek.	χθές	χόρτος	λειχω	χολη	εἰχ-ειν		ὄχος (carriage)
Latin.	heri (= hesi)	hortus	lingo	fel			veho
Gothic.	gis-tra	gards	láigô		aigan		vigs (way)
O. H. G.	këstar	karto	lêkôm		eikan		wagan (waggon)
English.	yes-ter(day)	yard (O. E. geard)		gall	owe, own (O.E. ágan)		way (O.E. weg) wag, waggon

[1] Irregular.

(2) *dh*, *θ*, *d*, *t*.

SANSKRIT.			dhu (shake, blow), dhûma (smoke)	ruh (rudh, to increase)	madhya
GREEK.	θυγάτηρ	θύρα	θύειν, θυμος (smoke)		
LATIN.		fores	fumus (smoke)		medius
GOTHIC.	dauhtar	daur	(dauns, smell)		midis
OLD HIGH GERM.	tohtar	tor	tunst, taum	ruota (rod	miti
ENGLISH.	daughter	door	dust (= dunst)	rod, rood	midd-le

(3) *bh*, *φ*, *f*, *p*.

SANSKRIT.	bhri	bhratri	bhanj (= bhranj)	bhavâmi	nabhas	ubhau	
GREEK.	φέρω			φύω	νέφος, νεφέλη	ἄμφω	φαρσω
LATIN.	fero	frater	frangere	fu (in fui)	nubes, nebula	ambo	forare
GOTHIC.	baira	brôthar	brikan			bai	
OLD HIGH GERMAN.	piru	pruoder	prëchan	pim (Ger. bin)	nepul (Ger. nebel)	beidê	poran
ENGLISH.	bear	brother	break	(I) be (O.E. boom)		both	bore

II. (4) *g*, *k*, *ch*.

SANSKRIT.	jnâ	ǰânu	janî	gar (to sound)	bhuj (= bhrug)		ajra		yuj (to join)
GREEK.	γνῶμι	γονυ	γυνή	γηρύω (speak)		γένυς	ἀγρός	ἔργον (work)	
LATIN.	gnoscǫ	genu		garrio	fruor, fungor	gena	ager		jungo
GOTHIC.	kan	kniu	quinô / quens		brukjan	kinnus	akrs	waúrkjan (to work)	yuk (yoke)
OLD HIGH GERM.	chan	chniu	chena	quiru (to groan)		chinni		wërah, Ger. wërk (work)	joh (yoke)
ENGLISH.	can	knee	queen / quean	call	brook	chin		work	yoke

(5) *d*, *t*, *z*.

SANSKRIT.	pâda	uda	drus (wood)	asru (= dasru)	dashan	dama (house)
GREEK.	ποδός	ὑδωρ	drumas (tree)	δάκρυ	δέκα	δόμος - ,,
LATIN.	pes (pedis)	unda	δρῦς	lacruma (= dacruma)	decem	domus ,,
GOTHIC.	fôtus	watô		tagr	taihun	timrja (a builder)
OLD HIGH GERM.	vuoz	wazar (Ger. wasser)	triu	zahar (Ger. zähre)	zëhan (Ger. zehn)	Ger. zimmer
ENGLISH	foot	water	tree	tear	ten (= tehen)	timber

(6) *b*, *p*, *f*. (See Table VII., p. 305.)

Initial *b* is rare in pure Teutonic words. In Sanskrit, Greek, and Latin, *b* has arisen out of other sounds.

III. (7) *k*, *h*(*g*), *g*(*h*).

SANSKRIT.	kas	kapâla	shira (= kira)	kalama	kalya (sound)
GREEK.	κός (ποϛ)	κεφαλή	κάρα	κάλαμος	κᾶλός (fine)
LATIN.	quis	caput	cere-brum	calamus	
GOTHIC.	hwas	haubith	hvairnei		hails
O. H. GER.	wer	houpit (Ger. haupt	hirni	halam, halm	(Ger. heil)
ENGLISH.	who (O.E. hwa)	head (O.E. heafod)	M.E. hern (brain)	haulm	hale, whole

(8) *t*, *th*, *d*.

SANSKRIT.	twam	danta	tan	tanu	tul
GREEK.	τί	ὀδούς	τείνω	ταναος	τλῆναι
LATIN.	tu	dens	tendo, teneo	tener	tuli, tolli
GOTHIC.	thu	tunth	thanja		thula
O. H. GER.	du	zand		dunni (Ger. dünn	Ger. dulden
ENGLISH.	thou	tooth	to thin	thin	thole (Mid. Eng.)

(9) *p*, *f*(*b*), *v*(*f*).

SANSKRIT.	pitri	upari	saptan	naptri	
GREEK.	πατήρ	ὑπερ	ἑπτα	νέπ-οδ-ες	παῦ-ρος
LATIN.	pater	s-uper	septem	nepos	pau-cus, pau-lus
GOTHIC.	fadar	ufar	sibun		fawai
O. H. GER.	vatar	uber	sibun (Ger. sieben)	nefos	fôhê
ENGLISH.	father	over (O.E. ofer)	seven (O.E. seofon)	O.E. nefa	few (O.E. feawa)

EXCEPTIONS TO GRIMM'S LAW.

Among exceptions to Grimm's law must be mentioned, (1) Onomatopœie and imitative words; (2) borrowed words; (3) irregular sound-change (cf. Sanskrit *aham* = *agam* (Gr. ἐγώ); *hrid* (= *krid*), Eng. *heart*, Lat. *fera* = *thera* (Gr. θηρ); (4) *sk* (*sc*), *st*, *sp*, where the *k*, *t*, and *p* are preserved by the preceding *s*; cf. Lat. *scindo*, Goth. *skaida*, Eng. *shed* (here *sh* comes under (3), having arisen out of an older *sc* or *sk*); Lat. *stella*, Goth. *stairnô*, Eng. *star*; (5) final *t* is preserved by a preceding guttural; Lat. *octo*, Goth. *ahtan*, Eng. *eight* (O.E. *ahta*); Lat. *nox* (*noctis*), Eng. *night* (O.E. *niht*); (6) final *t* is *d* (instead of *th*) after *n*; Lat. *centum*, Eng. *hundred*; cf. particles in *-ont* (Greek), *-ant* (Lat.), *-end*, *-and* (Old English).

VALUE OF GRIMM'S LAW.

Without this simple law, there could be no exact etymological investigation, and consequently no linguistic science. The recognition of this regular permutation at once put an end to all guess-work in comparative philology. It showed us exactly what forms to expect in the kindred tongues; it compelled us to acknowledge that in philology 'things

are not what they seem.' The knowledge of this law at once puts us on our guard and keeps us from blundering—prevents us comparing the wrong words.

Thus no sound etymologist would now think of putting side by side English *care* and Latin *cura*, for 'Grimm's Law' points distinctly to Latin *gravis* as the analogue of *care*. In older English *care* meant *sorrow, grief*.

This law helps us to recover lost or older forms in cognate dialects. Without the existence of Old English *heafod*, we should have been able, by applying Grimm's law in the comparison of Latin *caput* with English *head*, confidently to assert the loss of an original *f* in the latter. And not only are we able to restore a lost form, but also a more primitive meaning that has long been disused, while the external form of the word has remained intact. Thus the English *brook*, 'put up with,' can only be compared with Latin *fruor* = *frugor*; and we know that the Old English *brucan*, the parent of *brook*, once meant 'to eat' or 'to enjoy.'

By means of this regular interchange of sounds we are enabled to see that the Aryan dialects do not stand to each other in the position of derived dialects, like the Romance languages to Latin, but in the relation of kindred tongues, of which some have been more fortunate than others in preserving relics of more original forms or more primitive meanings. English *break*, for instance, has suffered less change than Sanskrit *bhanj*. (See Trans. Philological Society, 1875-6, Pt. I., p. 7.)

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